Minnesota Public Utilities Commission

Staff Briefing Papers

Part I

Meeting Dates: June 23, 2015 (Oral Argument)
June 25, 2015 (Deliberations) ..... Agenda Item **#_7**_**

Company: Xcel Energy (Xcel or the Company)

Docket No. **E-002/M-13-867**

In the Matter of the Petition of Northern States Power Company, dba Xcel Energy, for Approval of Its Proposed Community-Solar-Garden Program

Issue: Should the Commission make changes to Xcel's Community Solar Garden (CSG) program?

Staff: Andrew Bahn ..... (651) 201-2249
Susan Mackenzie 201-2241

Relevant Documents

Order rejecting Xcel's tariff ..... issued April 7, 2014
Order approving solar-garden plan. ..... issued September 17, 2014
Order denying request for clarification. ..... issued February 13, 2015
Order clarifying solar-garden application process. ..... issued February 13, 2015

MRES ..... September 30, 2014
DOC comments ..... October 1, 2014
Xcel Energy ..... October 1, 2014
Sundial Solar ..... October 1, 2014
MN Community Solar ..... October 1, 2014
MREA ..... October 1, 2014
A Work of Art Solar ..... October 1, 2014
Fresh Energy, ELPC, ILSR, IWLA ..... October 1, 2014
MnSEIA. ..... October 1, 2014
SoCore Energy. ..... October 1, 2014
Xcel compliance ..... October 7, 2014
MnSEIA request extend comment period ..... November 24, 2014
ELPC, IREC, Vote Solar (National Group) ..... December 2, 2014

Fresh Energy, ILSR, IWLA. ..... December 4, 2014
Xcel compliance/implementation announcement (business plan). ..... December 5, 2014
Kandiyo Consulting ..... December 22, 2014
Xcel supplemental comments. ..... January 13, 2015
Xcel letter. ..... January 22, 2015
Xcel comments ..... February 10, 2015
Fresh Energy, SunShare, SunEdison, Sunrise in response to Xcel. ..... February 20, 2015
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Novel Energy Solutions. ..... February 24, 2015
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DOC comments ..... February 24, 2015
MN Community Solar ..... February 24, 2015
MnSEIA. ..... February 24, 2015
IREC. ..... February 24, 2015
Fresh Energy, ELPC, ILSR, IWLA (Joint Commenters). ..... February 24, 2015
Solar Garden Community. ..... February 24, 2015
Xcel compliance filing. ..... February 27, 2015
Xcel compliance filing (VOS calculation). ..... March 2, 2015
Sunrise Energy ..... March 2, 2015
Fresh Energy. ..... March 2, 2015
Public comment (Matt Rohn) ..... March 2, 2015
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ELPC, Fresh Energy, Vote Solar, ILSR (Joint Commenters). ..... March 2, 2015
Xcel compliance (ARR calculation). ..... March 2, 2015
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Sunrise Energy. ..... March 4, 2015
DOC comments ..... March 4, 2015
Fresh Energy, ELPC, ILSR ..... March 4, 2015
Xcel reply. ..... March 4, 2015
OAG-RUD comments ..... March 4, 2015
Solar Garden Community. ..... March 4, 2015
Xcel compliance ..... March 6, 2015
SunShare, corrected (Public and Non-public). ..... March 9, 2015
PUC letter to Xcel and service list. ..... March 10, 2015
Xcel response to PUC letter ..... March 13, 2015
St. Paul Public Housing Agency ..... March 16, 2015
MN Chamber of Commerce ..... March 18, 2015
SunShare amended reply ..... March 20, 2015
Town of Big Lake. ..... April 1, 2015
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DOC comments ..... April 2, 2015

Solar Garden Community. ..... April 2, 2015
Fresh Energy, ELPC, ILSR, IWLA (Joint Commenters). ..... April 2, 2015
MnSEIA. ..... April 2, 2015
Xcel comments..... April 2, 2015
SunShare Energy..... April 2, 2015
Xcel compliance (monthly update)..... April 6, 2015
Xcel compliance (stakeholder meeting minutes)..... April 7, 2015
Xcel compliance..... April 7, 2015
Xcel bill credit process..... April 10, 2015
Xcel compliance (stakeholder meeting minutes)..... April 16, 2015
MnSEIA (and Exhibit A filed same date)..... April 28, 2015
Xcel comments (notification of project cancellations). ..... April 28, 2015
Solar Garden Community Petition..... April 29, 2015
OAG-RUD comments..... April 30, 2015
SunShare Energy..... April 30, 2015
MnSEIA letter in support Petition. ..... April 30, 2015
Fresh Energy letter in support of Petition. ..... April 30, 2015
MN Community Solar letter in support of Petition. ..... April 30, 2015
Solar Garden Community. ..... April 30, 2015
Fresh Energy, ELPC, ILSR..... April 30, 2015
MCEA, Sierra Club letter in support of Petition..... May 1, 2015
Council Member Cam Gordon..... May 1, 2015
DOC Motion to Show Cause. ..... May 1, 2015
DOC comments revised ..... May 1, 2015
TruNorth Solar (amended refiled). ..... May 4, 2015
Sundial Solar letter in opposition Petition. ..... May 4, 2015
Solar Garden Community ..... May 5, 2015
Xcel compliance, monthly update..... May 7, 2015
Xcel compliance, stakeholder meeting minutes..... May 12, 2015
NextEra Energy..... May 15, 2015
Clean Energy Organizations (MCEA, ILWA, Sierra Club). ..... May 18, 2015
Oak Grove Presbyterian Church. ..... May 18, 2015
Mark Thoson, Juliet Branca. ..... May 18, 2015
Fresh Energy, ELPC, ILSR..... May 18, 2015
MnSEIA. ..... May 18, 2015
IREC. ..... May 18, 2015
Kandiyo Consulting. ..... May 18, 2015
TruNorth Solar. ..... May 18, 2015
Xcel comments..... May 18, 2015
DOC comments..... May 18, 2015
OAG-RUD. ..... May 18, 2015
Northfield Area Community Solar..... May 19, 2015
Public Comments. ..... May 19, 2015
Public Comments. ..... May 19, 2015
Renewable Energy Partners. ..... May 19, 2015
Solar Garden Community (amended with Exhibit). ..... May 19, 2015
Xcel compliance filing (monthly update). ..... June 6, 2015

The attached materials are workpapers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

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Statement of the issue

Should the Commission make changes to Xcel's Community Solar Garden (CSG)[1] program?

Introduction

The 2013 CSG statute, Minn. Stat. § 216B.1641, requires Xcel to file a plan to operate a community-solar-garden program, under which customers will be able to subscribe to solar generating facilities (known as "community solar gardens," or simply "solar gardens") and receive bill credits for a portion of the energy generated. As with any new program, questions and concerns have arisen about how the program should operate. Xcel and stakeholders have had questions over interpretations of Commission Orders and of the statute. There have also been differences of opinion over the program details.

To date, the Commission has issued four Orders in this matter:

- ORDER REJECTING XCEL'S SOLAR-GARDEN TARIFF FILING AND REQUIRING THE COMPANY TO FILE A REVISED SOLAR-GARDEN PLAN, issued April 7, 2015.

  In this Order, the Commission rejected Xcel's solar-garden tariff filing and required the Company to file a revised solar-garden plan, including an amended tariff and standard contract. The Commission required Xcel to incorporate the following elements into its revised plan, among other changes:

  - Impose no limits on the installed capacity of solar gardens and process developer applications on a first-ready, first-served basis.
  - Credit solar-garden subscribers' bills at the full retail rate for their portion of the garden's production, rolling surplus credits over from month to month and purchasing any remaining credits at the end of February.
  - Purchase unsubscribed energy from the solar-garden operator at Xcel's avoided-cost rate for solar gardens 40 kilowatts or larger and at Xcel's average retail utility energy rate for solar gardens smaller than 40 kilowatts
  - Allow a solar-garden operator, at its option, to retain the renewable-energy credits associated with the garden's production or to sell the credits to Xcel at a Commission-specified rate.

  The Commission also directed Xcel, within 30 days of the Commission's order approving a value-of-solar methodology in Docket No. E-999/M-14-65, to file a value-of-solar tariff for solar gardens or, alternatively, to file a calculation of the value-of-solar rate for solar gardens and show cause why the rate should not be implemented for solar gardens.

[1] Xcel refers to the program as Solar Rewards Community or S*RC.

- ORDER APPROVING SOLAR-GARDEN PLAN WITH MODIFICATIONS, issued September 17, 2014.

  In this Order, the Commission approved Xcel's CSG plan pursuant to Minn. Stat. § 216B.1641, including revisions proposed by Xcel and other modification made by the Commission. The Commission found that it was not in the public interest to use the value-of-solar rate for community solar gardens at that time; instead, it ordered Xcel to continue using the applicable retail rate (ARR) with the option for community-solar-garden operators to transfer solar RECs to Xcel at the compensation rates set in the Commission's April 7, 2014 Order.

  The Commission directed parties to engage in further discussions and to file comments by October 1, 2014, regarding the appropriate adder, if any, to apply in conjunction with a proposed value-of-solar rate to ensure compliance with the community-solar-garden statute, including, but not limited to, a requirement that the community-solar-garden plan approved by the Commission reasonably allow for the creation, financing, and accessibility of CSGs.

  The Commission found that CSG projects filing complete applications under the ARR would be able to lock in the REC price for the duration of the 25-year contract. It also found that, while the ARR was in effect, REC payments would last for the full term of the contract. The Commission ordered other tariff changes and directions for implementation, including a revision to the definition of "Community Solar Garden Site." The Commission approved Xcel's proposal to recover CSG program costs through the Fuel Clause Adjustment (FCA) mechanism.

- ORDER DENYING REQUEST FOR CLARIFICATION AND SETTING PUBLIC INFORMATION REQUIREMENTS, issued February 13, 2015.

  In this Order, the Commission denied TruNorth Solar's request for clarification of the Commission's September 17, 2014 Order and required Xcel to post certain information on its website to help identify whether a potential subscriber met the definition of a retail customer and qualified as the legal entity taking service. The Commission also required Xcel to file all approved minutes and the agendas from stakeholder workgroup meetings.

- ORDER CLARIFYING SOLAR-GARDEN APPLICATION PROCESS, issued February 13, 2015.

  In this Order, the Commission clarified that solar-garden applications would enter the appropriate Section 10 interconnection queue and be placed or reordered in this queue based on the date and time that Xcel determined the application to be complete as defined in tariff. The Commission also required Xcel to file monthly updates on the status of the initial cohort of 427 solar-garden applications.

Staff is aware that parties are currently having discussions that may lead to settlement on some or all of the issues. If a settlement (full or partial) is reached, staff requests parties notify the Commission and file the settlement agreement as soon as possible. In the event of a filed settlement agreement, staff will review it and may issue supplemental briefing papers if appropriate and if time permits.

Due to the multiple rounds of comments over an extended period of time, on May 1, 2015, the Commission issued a notice asking parties to identify the remaining issues that would require Commission action, including but not limited to changes to Commission Orders or Commission-approved tariffs. Comments in response to this notice were filed on May 18, 2015. For the most part, staff has approached the list of issues for the Commission to address based on what parties identified as outstanding issue in their May 18, 2015 comments.

These briefing papers (Part I) cover the following issues and are divided into three sections:

- multiple CSG development projects (co-location), pages 4-74, Decision Options p. 74
- bill credit rate, pages 74-88, Decision Options p. 87
- interconnection, pages 89-106, Decision Options p. 103

The Commission's decision on the issue of colocation will affect the remaining issues and should be considered first. The decision options for each issue area can be found at the end of that section.

Part II of the staff briefing papers will cover other issues, such as: (1) REC payments for unsubscribed energy, (2) REC payments in years 11-25 for gardens in the Solar*Rewards or Made in Minnesota programs, (3) assignment of project deposits, and (4) reporting requirements.

Section One: Multiple CSG Development Projects (co-location)

In its April 28, 2015 Supplemental Comments, Xcel stated it would begin implementing its Community Solar Garden (CSG) program so that only those applications that are in compliance with the one MW statutory limit proceed through the application process. Xcel stated further that the program must be implemented in accordance with the express terms and intent of the authorizing legislation and the legislation's history. In particular, Xcel stated it would implement the CSG program accordingly:

- All existing or new applications which propose co-located gardens with an aggregate capacity greater than one MW would be scaled to one MW.
- Xcel will process applications for co-located gardens provided that, in the aggregate, they do not exceed one MW.
- Xcel will also process applications from multiple individual (unaffiliated) developers who propose co-located sites provided the gardens from any single developer do not exceed one MW in the aggregate. If multiple developers arrange a host of garden swaps to aggregate a series of sites to establish utility scale solar efficiencies, Xcel will treat the developers as affiliates or partners and reject developer efforts to arbitrage the statute.
- Xcel will not process applications for projects in excess of one MW where it is simply dividing up a utility-scale project into multiple smaller gardens.[2]

A. Statement of Issue

Is Xcel's plan for implementing the CSG program, and limiting proposed co-located gardens to an aggregate capacity of no greater than one MW, in compliance with past Commission Orders and Minn. Statutes?

B. Background

In its April 7, 2014 *Order Rejecting Xcel's Solar-Garden Tariff Filing and Requiring the Company to file a Revised Solar-Garden Plan* (Order Rejecting CSG Plan) the Commission described Minn. Stat. §216B.1641 restriction on the size of the overall program and individual garden size.

> The statute places no limit on a solar-garden program's overall size, but it contains a number of provisions limiting individual garden size and subscribership. A solar garden may have a nameplate capacity of no more than one megawatt (MW). A garden must have a minimum of five subscribers, each

[2] Docket No. E-002/M-13-867, In the Matter of the Petition of Northern States Power Company, dba Xcel Energy, for Approval of Its Proposed Community Solar Garden Program, *Supplemental Comments and Notice to Administer Program Consistent with CSG Statute Community Solar Gardens Program*, April 28, 2015, p. 8.

> with a subscription representing at least 200 watts of the garden's capacity but no more than 40 percent of the garden's output.[3]

Specifically, Minn. Stat. §216B.1641, Subd (a) states the following:

> …The community solar garden program must be designed to offset the energy use of not less than five subscribers in each community solar garden facility of which no single subscriber has more than a 40 percent interest. …There shall be no limitation on the number or cumulative generating capacity of community solar garden facilities other than the limitations imposed under section 216B.164, subdivision 4c, or other limitations provided in law or regulations.

And, Minn. Stat. §216B.1641 Subd b:

> (b) …The solar garden must have a nameplate capacity of no more than one megawatt. Each subscription shall be sized to represent at least 200 watts of the community solar garden's generating capacity and to supply, when combined with other distributed generation resources serving the premises, no more than 120 percent of the average annual consumption of electricity by each subscriber at the premises to which the subscription is attributed.

In Xcel's original tariff filing, it had defined "Community Solar Garden Site" as "the parcel of real property on which the PV System will be constructed and located," including any easements, rights of way, and other real-estate interests reasonably necessary to construct, operate, and maintain the garden.[4]

SunEdison argued that a solar-garden site should be defined based on a point of interconnection rather than a single parcel of land. SunEdison stated that defining "garden site" based on point of interconnection would allow multiple facilities to be installed in close proximity to each other, maximizing land use; reducing system costs, interconnection fees, and service costs; and allowing more customers to participate in solar gardens.[5]

The Commission concurred with SunEdison that allowing a solar garden to include multiple parcels of land would benefit developers, subscribers, and likely Xcel.[6] The Commission's Order April 7, 2014 states that:

> Where a prospective garden operator controls multiple adjacent parcels of land, or even multiple closely situated parcels, the operator should be able to install

[3] *Id., Order Rejecting Xcel's Solar-Garden Tariff Filing and Requiring the Company to file a Revised Solar-Garden Plan,* April 7, 2014, p. 3

[4] *Id.* p. 12

[5] *Id.*

[6] *Id.*

> solar panels on multiple parcels, connect them to grid through a single interconnection point, and take advantage of the resulting economies of scale.[7]

The Commission's April 7, 2014 Order required Xcel to revise its tariff to expand the definition of "Community Solar Garden Site" to allow a garden site based on a point of interconnection. [8]

In accordance with the Commission's April 7 order, Xcel updated the standard contract to define "community solar garden site" based on a point of interconnection: "'Community Solar Garden Site' shall mean the point of interconnection associated with the Community Solar Garden."

Several parties filed comments in response to the Xcel's filing and expressed concern that the revised definition of "community solar garden site" was still not sufficiently clear and that multiple gardens may be located in one place. Fresh Energy recommended that the Commission explicitly state that multiple solar garden sites may be located on a single parcel of land.[9]

SunEdison suggested that substituting the term "point of common coupling" for "point of interconnection" in the definition of a garden site would help clarify the definition. SunEdison pointed out that the solar-garden tariff does not define "point of interconnection" and asserted that the term appears nowhere else in Xcel's ratebook. However, it stated that Xcel's distributed-generation tariff uses the term "point of common coupling" in defining "generation system."[10]

SunEdison also suggested that the Commission eliminate a reference to "point of interconnection" in the application-process section of the solar-garden tariff. The tariff required a developer to submit "evidence of site control at the point of interconnection" as part of its application and SunEdison recommended that the tariff be amended to require "evidence of control of the Community Solar Garden Site."[11]

Xcel stated that the current definition of "community solar garden site" does not preclude multiple solar gardens from being located on a single parcel of land, provided that each garden has its own production meter and interconnection agreement. Xcel stated that it was willing to coordinate with a solar-garden developer to ensure that solar gardens situated in close proximity to one another can share distribution infrastructure.[12]

In its September 17, 2014 *Order Approving Solar-Garden Plan with Modification*, the Commission stated that it:

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[7] *Id.*

[8] *Id.*, Ordering ¶8, p. 27.

[9] *Id., Order Approving Solar-Garden Plan with Modifications,* September 17, 2014, p. 14.

[10] *Id.*

[11] *Id.*

[12] *Id.*

> …concurs with Fresh Energy that the definition of "community solar garden site" should expressly state that solar gardens may be sited near each other in order to share distribution infrastructure. This clarification will allow solar gardens to be built more cost-effectively and is consistent with the statutory mandate that the program reasonably allow for the creation, financing, and accessibility of solar gardens.
>
> The Commission also agrees with SunEdison that replacing the term "point of interconnection" with "point of common coupling," a term that is defined and used elsewhere in Xcel's tariffs, will add clarity to the definition of "community solar garden site."
>
> Accordingly, the Commission will require Xcel to replace the current definition of "community solar garden site" with the following definition:
>
> > "Community Solar Garden Site" is the location of the single point of common coupling located at the production meter for the Community Solar Garden associated with the parcel or parcels of real property on which the PV System will be constructed and located, including any easements, rights of way, and other real-estate interests reasonably necessary to construct, operate, and maintain the garden. Multiple Community Solar Garden Sites may be situated in close proximity to one another in order to share in distribution infrastructure.
>
> And as recommended by SunEdison, the Commission will direct Xcel to amend the solar-garden tariff to remove the requirement that developers submit "evidence of site control at the point of interconnection" and instead to require developers to submit "evidence of control of the Community Solar Garden Site."[13]

C. Xcel's Implementation Plan

On October 7, 2014, in a Compliance Report submitted in response to the Commission's September 17, 2014 Order, Xcel notified the Commission of its intent to work with parties to facilitate interconnection, but also that it would be guided by the Commission's Orders and the Legislatures intended application of the CSG program when interconnecting multiple gardens adjacent to each other:[14]

> In its September 17, 2014 Order at page 14, the Commission discusses instances where multiple gardens are located adjacent to one another. We note that we do intend to work with parties to facilitate interconnection, and we do so guided by our understanding of the legislature's intended application of this program: to

[13] *Id.*, pp. 14-14

[14] *Id.*, Xcel Compliance Report in Response to the Commission's April 7, 2014 Order.

> encourage solar participation by those with traditional barriers. To the extent we observe applications of this program beyond the legislative intent, we will keep the Commission informed of developments in program uptake.

In its December 29th 2014 Comments in Response to the Commission's December 12, 2014 Notice of Comment Period, Xcel noted that, since the launch of the CSG application system on December 12, 2014, it had received over 400 applications (representing over 400 MW).[15]

In its January 13 Supplemental Comments, Xcel provided further detail and data on the quantity, size, and general location of applications it had received to date, and first raised the issue of co-locations of CSGs and its resemblance to utility-scale solar. Xcel highlighted the following observations on the applications it had received:[16]

- Applications for 431 MWs of community solar were received as of the filing[17]
- Most projects proposed a series of adjacently-sited gardens. There were only 75 separate sites proposed. The largest project at that time proposed 40 MW of adjacently sited gardens.[18] See Table 1 for further information.

Table 1

Garden Site Size			
Total MW	**# of Projects**	**SUM MW**	**% of Total**
<=1	23	18	4%
>1-1.99	5	10	2%
2-5.99	18	55	13%
6-9.99	13	100	23%
10-19.99	12	138	32%
20-29.99	2	41	10%
30	1	30	7%
40	1	40	9%
	75	431	100%

- The majority of projects were concentrated in a few geographic areas. Table 2 demonstrates that most planned development activity falls outside of the urban core.

[15] *Id.*, Xcel Initial Comments, December 29, 2014, pp. 1-2.

[16] *Id.*, Xcel Supplemental Comment, January 13, 2015, pp. 3-4

[17] Later in these briefing papers, staff summarizes a filing where Xcel states that 560 MW of proposals were received.

[18] As listed later in these briefing papers, one 50 MW project was later proposed after this filing.

Table 2

Garden Locations	
Community Classifications	**MW**
Urban	1.9
Suburban	66.3
Outside Urban Area	362.9

Xcel stated it had anticipated that some projects might be planned with a few individual gardens sited immediately next to one another in order to share some infrastructure and development costs. Instead, Xcel noted that the above data illustrates the siting of CSGs next to each other on a different scale, with approximately 96 percent of all the projects proposed for more than one MW. Xcel described these large projects as resembling utility-scale solar development more than community-scale development and that this was not consistent with what the Commission intended when approving the Company's program.[19]

On February 10, 2015, Xcel submitted Comments with the intention of bringing to the Commission's attention a significant policy issue in regard to the large projects proposed in the applications for CSGs that Xcel had received to date.[20]

In its Comments, Xcel stated that the Commission may wish to revisit the language in its September 17, 2014 Order which permitted multiple community garden sites to be situated in close proximity to one another. According to Xcel, while the CSG statute is silent on the proximal situation of gardens, it provides a firm limitation: gardens may have a nameplate capacity of no more than one megawatt. Xcel stated that it finds it unlikely the Legislature intended to render its standard meaningless by embracing 40 adjacent gardens. In addition, Xcel stated it did not advocate for this scale of development when it agreed to work with parties to avoid inefficiencies from performing engineering reviews in isolation where there was more than one garden on neighboring properties.[21]

According to Xcel, developers were essentially planning utility-scale solar projects; then, solely for the purposes of meeting program requirements, designating each one MW portion as a single garden. Xcel acknowledged that the Commission had provided guidance to allow for solar gardens to be sited near each other in order to share distribution infrastructure, but stated that it believed the types of projects currently in the queue were not consistent with the expectations underlying and supporting the Commission's guidance for the following reasons:[22]

[19] *Id.*, pp. 4-5.

[20] *Id.*, Xcel Comments, February 10, 2015, p. 1.

[21] *Id.*, p. 6.

[22] *Id.*, p. 2.

- *Operational Considerations* – complications created by interconnecting large, "utility-scale" solar projects to the distribution system.
- *Legislative Intent* – large, "utility-scale" solar projects are inconsistent with the legislative intent.
- *Rate Pressure* –rate impacts to non-participating customers from adding 430 MW of CSG projects.

Operational Considerations - Xcel stated that in certain areas of its distribution system, interconnection of projects greater than one MW may cause a backflow to Xcel's transmission system and that its Section 10 Interconnection tariff states that requests may not exceed 10 MW, based on the aggregate of the total generation nameplate capacity. Based on its tariff, Xcel stated projects greater than 10 MW must be referred to MISO. [23]

In addition, Xcel stated the technical ability to interconnect large projects also raises challenging legal and regulatory questions including questions of jurisdiction that may arise when an interconnection request is referred to MISO. Xcel stated further that the Federal Energy Regulatory Commission (FERC) has granted the Company's request to terminate its mandatory purchase obligation under PURPA for QFs larger than 20 MW and this may implicate the state's jurisdiction in these matters..[24]

Legislative Intent - Xcel stated that the legislative intent was for the formation of community solar gardens when neighbors join neighbors and share a solar array, sized up to one MW, at a central location near where they live or work. In addition, Xcel stated that it believed community solar was meant to expand access to the benefits of solar to customers who are traditionally unsuited for rooftop solar and these included customers who lack access to an appropriate roof location, are unable to afford the upfront costs of an installation, or are discouraged by system maintenance or other considerations. [25]

Xcel stated further that, based on recent media coverage and anecdotal knowledge, it anticipated that the majority of subscribed production capacity was being marketed to large commercial and industrial customers and that there is potential for residential or small business customers to be largely excluded from participation.[26]

Xcel added it was concerned that some developers were essentially skirting the PPA process, leveraging the cost attributes of utility-scale development, and securing benefits through a customer bill credit rate intended for small-scale development.[27]

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[23] *Id.*, pp. 3-4.

[24] *Id.*

[25] *Id.*, pp. 4-5

[26] *Id.*

[27] *Id.*

Rate Pressure- Since the bill credits are priced higher than the avoided energy cost and the cost of utility-scale solar, Xcel stated it was concerned about a scenario where relatively few large customers achieve significant savings, at the expense of imposing higher costs on the rest of Xcel's Minnesota customer base. According to Xcel, if 431 MW come online at current rates, it estimated that the Minnesota Fuel Clause would increase by over $50 million and Minnesota customers would see their cost of fuel rise by more than six percent. This would result in Customers experiencing a bill increase between one and a half and two percent. Xcel stated this cost impact is particularly concerning because it has been established that large-scale solar can be obtained on behalf of customers at about half the cost.[28]

In addition to the costs to customers, Xcel stated the cost to the system is also a concern for the Company. According to Xcel, if a developer offers garden subscription pricing in the range of 90-98 percent of the bill credit rate, this offer could result in an annual savings of roughly $40,000 to $200,000 for a large commercial customer subscribing to the equivalent solar garden production of 20,000 MWh per year. If this customer's average retail rate was 9.456 cents per kWh, the customer would see a net energy savings ranging from 2 percent to nearly 12 percent. Xcel noted that this arrangement for a large commercial customer would add in excess of $1.4 million dollars of incremental cost to the system. Since the bill credit payments will be recovered through the fuel clause, all non-exempt Minnesota customers will, in essence, fund this customer's savings, according to Xcel.[29]

In its March 4, 2015 Reply Comments, Xcel proposed a plan for moving forward with community solar garden projects, while recognizing that approving utility-scale projects at CSG rates is not in the best interest of all of its customers or sustainable over the long-term. According to Xcel, its proposed plan is consistent with its interpretation of the one MW limit in the CSG statute, Commission Orders and its tariff. Xcel requested the Commission confirm its plan to administer the CSG program as follows:[30]

- Process applications proposing solar gardens that are no more than one MW.
- Consider a garden to be greater than one MW if it exhibits characteristics of being a single development consistent with Minnesota Statute section 272.0295. Specifically, Minn. Stat. § 272.0295 lists the following criteria as indicative of a single development: ownership structure, an umbrella sale arrangement, shared interconnection, revenue-sharing arrangements, and common debt or equity financing.
- Process co-located applications from a single developer provided that, in the aggregate, they do not exceed one MW.
- Process applications from multiple individual developers who propose collocated sites provided the gardens from any single developer do not exceed one MW in the aggregate.

[28] *Id.*, pp. 5-6.

[29] *Id.*

[30] *Id.*, pp. 3-4.

- Applications from a single developer in excess of one MW who is simply dividing up a utility-scale project into multiple smaller gardens will not be considered.

Xcel stated that based on the applications it had received to date, applying its statutory interpretation would result in up to 80 MW of community solar gardens once the initial set of gardens are operational and this would mean Minnesota would have one of the largest solar garden programs in the country. Xcel stated also that there is a place for utility-scale solar on its system, especially when it is procured through a competitive process so that Xcel's customers receive the benefit of market based pricing.[31]

According to Xcel, the Commission recognized the challenges facing developers in financing gardens when it established the initial rates for payment of the energy generated by community solar gardens. Accordingly, the approved credit was priced at a level greater than a pure net-metered rate by using the average retail rate inclusive of demand and customer charges plus a Renewable Energy Credit (REC) payment. In addition, the Commission allowed for developers to co-locate solar garden projects.[32] Although the CSG program does not have an aggregate cap, Xcel stated that the scale of the program was limited by the statutory requirement limiting garden size to one MW. [33]

Additionally, Xcel stated that one applicant had proposed 50 MW of co-located one MW gardens in Monticello and that this developer is contending this project should be treated as one 50 MW development for purposes of an energy facility siting process, thus preempting any local zoning or permitting authority, while maintaining the project remains eligible for the CSG program as 50 contiguous gardens.[34] [35]

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[31] *Id.*, p. 5.

[32] *Id.*, p. 2.

[33] *Id.*, pp. 2-3.

[34] *Id.*, p. 3. Staff notes that Minnesota Statute 216E.021 addresses the issue of distributed solar projects for purposes of siting authority. The statute outlines what characteristics of a distributed set of solar energy generating systems would be subject to the Commission site permit process. The solar size determination statute notes that the nameplate capacity of one solar projects *must* be combined with the nameplate capacity of other solar projects if (among other considerations the Department deems appropriate): 1) is constructed within the same 12-month period, and, 2) exhibits characteristics of a single development (ownership structure, umbrella sales arrangements, shared interconnection, revenue sharing, and common debt or equity financing). The statute designates the Department of Commerce as the decision maker on a project's 'size' and disputed determinations would come to the *Chair* of the Commission for a final determination.

[35] Further, staff is aware through media reports and trade secret information request responses, that other CSG developers, in addition to the Monticello proposal discussed by Xcel, have CSG-planned projects that in aggregate add up to more than 50 MW. Contrary to the Monticello developer, these CSG-developers do not view their projects as aggregate under Minn. Stat. § 216E.021. Therefore, staff believes that there are CSG developers that have opposite, and incompatible, legal interpretations of siting authority for CGS projects under Minn. Stat. § 216E.021.

Xcel stated further it understood the intent of the Commission's September 17, 2014 Order was to accommodate multiple smaller gardens co-located for economic reasons. Moreover, Xcel stated that that this also appears to be the Commission's understanding based on its February 13, 2015 Order Denying Request for Clarification and Setting Public Information Requirements, where the Commission stated:[36]

> …[F]ully offsetting energy use is not the primary purpose of a solar-garden program. If it were, the statute would not cap solar-garden size, set a minimum number of subscribers per garden, or limit a subscriber's share of garden output to 40 percent. These restrictions appear instead to serve the statutory purpose of ensuring that solar gardens are accessible to a broad cross-section of the community.

According to Xcel, as the conversation regarding co-located gardens was taking place in the summer of 2014, it did not anticipate that applications would be submitted for utility-scale solar projects within the context of the CSG program. Xcel stated that while it intended to work with developers to accommodate co-located gardens, it never intended or anticipated utility-scale solar developments proceeding through the community solar garden program.[37]

In its March 4, 2015 Comments, Xcel provided further Comment on the legislative intent, rate impact and subscribers of the CSG program.

Legislative Intent – Xcel stated that it believed the legislative history is very relevant to how it proposed to administer the CSG program. Xcel explained that to be consistent with the statutory construct and sound public policy, utility-scale projects should be evaluated in the resource planning process and subject to a competitive request for proposal (RFP) process, where the Company is required to buy the output only after it has been found to be in the public interest to do so from a resource planning perspective. [38]

According to Xcel, the purpose of the CSG program is not in dispute, in that legislation intended CSGs to provide access to solar energy to "renters and property owners lacking sufficient capital to install their own solar systems or whose property may be shaded or otherwise unsuitable for a solar installation." Xcel stated that the Department of Commerce described the community solar garden program in similar terms on its website: "The [community solar garden] program is designed for customers who cannot take advantage of other solar programs, because they rent, live in multifamily dwellings, their homes or businesses are not suitable for solar installations, or rooftop solar installations aren't right for them for other reasons. Participants can subscribe to as little as 200 watts of solar or enough to cover 120 percent of their annual electricity usage."[39]

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[36] *Id.* See Also, Order Denying Request for Clarification and Setting Public Information Requirements, February 13, 2015, p. 4.

[37] *Id.*, p. 9.

[38] *Id.*, pp.8-9.

[39] *Id.*, pp. 5-6.

Xcel stated further that, based on its review of the legislative history, it was unable to find a statement from a legislator or solar advocate claiming or suggesting that utility-scale projects should be eligible for the community solar garden program. Xcel explained that during the debate on solar provisions, advocates stated that strict capacity limits would be imposed to avoid subsidizing utility-scale projects. As an example, Xcel described a key proponent of community solar gardens testified that regulatory safeguards were necessary to ensure that a program intended to promote community solar did not provide "a back door for independent power producers." The representative explained: "if there's a large player from out-of-state or any state that wants to do a utility-scale project, that's fine, [but] certainly we would expect them to go through the PPA process, or the process that is intended for that scale."[40]

To provide some context for what the Legislature likely understood utility-scale solar projects to be, Xcel noted that at the time the 2013 Community Solar Garden legislation was being considered by the Legislature, the Slayton Solar project (a PPA) was the largest solar project in the state of Minnesota at 2 MW. The only other large solar project in the state at the time was at the Ikea store located in Bloomington, MN, which has a total capacity of one MW. In addition, according to Xcel, MnSEIA informed the Senate Committee on Tax that "we only have one [solar energy system] in the state currently over one MW AC, which is the Slayton Solar Farm." MnSEIA also explained that "a 1 MW system would be larger than what is on Ikea. So that gives you some idea of scale."[41]

Xcel also noted that the Legislature has confirmed that it sees one MW as the cut-off for utility-scale solar, in subsequent remedial legislation. In 2014, legislation set new policy on the treatment of solar projects for tax purposes. Minn. Stat. § 272.0295 anticipated and addressed the prospect of solar developers creating a series of projects just under the one MW limit in an attempt to avoid the production tax.[42] To address this issue, criteria were written into the tax code to determine whether different solar sites should be considered part of the same generating system:

> (b) The total size of a solar energy generating system under this subdivision shall be determined according to this paragraph. Unless the systems are interconnected with different distribution systems, the nameplate capacity of a solar energy generating system shall be combined with the nameplate capacity of any other solar energy generating system that: (2) exhibits characteristics of being a single development, including but not limited to ownership structure, an umbrella sales arrangement, shared interconnection, revenue-sharing arrangements, and common debt or equity financing.
>
> In the case of a dispute, the commissioner of commerce shall determine the total size of the system and shall draw all reasonable inferences in favor of combining the systems.

[40] *Id.*

[41] *Id.*

[42] *Id.*, p. 8.

> (c) In making a determination under paragraph (b), the commissioner of commerce may determine that two solar energy generating systems are under common ownership when the underlying ownership structure contains similar persons or entities, even if the ownership shares differ between the two systems. Solar energy generating systems are not under common ownership solely because the same person or entity provided equity financing for the systems.[43]

Xcel explained that in enacting Minn. Stat. § 272.0295, the legislature defined "utility-scale" solar as those projects which have an aggregate capacity of greater than one MW. According to Xcel, the 2014 Omnibus Tax bill was authored by Senator Koenen and he stated to the Senate Committee on Taxes that the bill would establish a "solar energy production tax for utility-scale solar energy systems" which have a "capacity greater than 1 MW," pointing out that the one MW limit "aligns with metering rules passed last year." Senator Koenen explained that under the bill "bigger projects out in the open, that would be ag[ricultural] land, would be subject to the production tax," but that the tax exemption for "[s]maller projects on the roof of a building . . . would remain what it is." Xcel explained that projects with a capacity of one MW or less are exempt from the production tax.[44]

Potential Rate Impact - In response to parties that suggested that Xcel should have included some of the values of solar that were identified in the Value of Solar (VOS) methodology process in its analysis of potential rate impacts in its February 10 Comments, Xcel stated that, had the goal of the analysis been to evaluate the long-term value compared to the 25 year cost of community solar applications, it may have been appropriate to include other factors. However, according to Xcel, the goal of the analysis was to estimate actual first year impact to its customers.[45]

Xcel explained that it estimated that it will pay $0.12/kWh for community solar energy through the CSG bill credit rate, and the enhanced CSG bill credit rate ranges between $0.11914/kWh - $0.15743/kWh depending on customer class and garden size. With the purchase of CSG energy, the Company will avoid other on-peak energy purchases. Therefore, instead of using the actual average $0.03/kWh for the basis of the avoided energy cost, Xcel stated it used the average actual on-peak energy rate of $0.04582/kWh that was recently filed as the on-peak energy payment rate under its Time of Day Purchase Service (Tariff Sheet 9-4). Xcel calculated a six percent increase in fuel rates, which results in a customer bill increase of approximately 1.5 – 1.8 percent. At its estimated CSG bill credit of $0.12/kWh, Xcel stated it would spend $0.0468/kWh more on community solar than competitively acquired utility-scale solar for every kWh purchased. Therefore, competitively-acquired utility-scale solar results in less of a financial impact to its customer's utility bills.[46]

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[43] Minn. Stat. §272.0295, Subd. 2(b)(2)

[44] Docket No. E-002/M-13-867, *Xcel Reply to Comments submitted by Parties on February 24, 2015 and pursuant to the Commission's February 13, 2015 Notice*, p. 8. See also footnote 17.

[45] *Id.*, pp. 9-10.

[46] *Id.*, pp. 10-11.

Subscriber Information - In response to developers and customers that advocated Xcel should adopt an anchor-tenant theory in the administration of the CSG program, Xcel stated it agreed with the underlying principle that anchor tenants can provide valuable support in the development of some community solar gardens, especially by making the financing for some projects more viable. However, Xcel explained that its approach for moving forward does not disturb the ability for solar developers to engage a subscriber who wants to own a 40 percent share. Xcel stated it disagreed with those advocates of the anchor tenant theory who envision 20 one-MW gardens in close proximity to one another, sharing distribution infrastructure that effectively moves 8 MW of the anchor tenant's load to the CSG program, because this is inconsistent with the legislative intent for a community solar program to help churches, residents, and small businesses where rooftop solar is not a viable option.[47] In addition, Xcel reiterated that it is also clear that the legislature did not intend for the CSG program to fully offset energy use of Xcel Energy's largest customers. As described above, the Commission similarly recognized that fully offsetting energy use was not the primary purpose of the CSG statute in this proceeding.[48]

Xcel stated that its primary concern is not whether large customers should be able to participate in the CSG program and it agreed that large customers should be allowed to participate within the parameters set forth in the statute. However, Xcel stated it is possible that the program could allow relatively few large customers to achieve significant savings at the expense of imposing significantly higher costs on the rest of Xcel Energy's Minnesota ratepayers because the CSG bill credits are priced higher than the avoided energy cost. According to Xcel, such significant cost subsidization is not in the public interest.[49]

In its April 2, 2015 Comments, Xcel noted again the stark contrast between the statutory provision limiting eligible garden sizes to one MW and the large project sites, some upwards of 50 MW, planned in its service territory and packaged as community solar.[50] In addition, Xcel reiterated that solar developers are targeting large customers to support their utility-scale projects and this could result in some customers from its commercial and industrial (C&I) customer class subscribing to garden capacity at a scale that matches or exceeds their energy consumption. Xcel stated that this could also result in a series of unintended consequences for communities grappling with local impacts from the utility-scale solar arrays proposed within their planning areas.[51]

Xcel also stated that it had observed that utility-scale solar resources can be obtained for roughly half of the current bill credit rate approved in this docket and concluded that the program rules

[47] *Id.*, p. 9.

[48] *Id.*, p. 11.

[49] *Id.*, p. 9.

[50] *Id.*, Xcel Comments in Response to the Commission's March 13, 2015 Notice of Comment Period, April 2, 2015, p. 1.

[51] *Id.*, pp. 1-2.

coupled with the high bill credit rate have created an environment where a few customers and developers reap substantial benefits, at the expense of all other customers, who pay far more than what they might otherwise for the same resource. Finally, Xcel noted that, as of the date of this filing, it had applications representing more than 500 MW of planned projects and less than thirty percent of sites are for stand-alone gardens of one MW or less.[52]

In its April 28, 2015 Supplemental Comments, Xcel announced it will begin implementing the CSG program so that only those applications that are in compliance with the one MW statutory limit proceed through the application process. Xcel stated that, because the intent and plain language of the statute are clear, it was providing notice that it will administer the program consistent with the statute and Commission Orders.[53]

Xcel stated that it appreciated the Commission's March 10 letter[54] stating the Commission would take up its concerns in late spring or summer, and the Company made good use of its time to convene a series of meetings with the Implementation Workgroup intended to challenge participants to come together around constructive solutions. However, according to Xcel, at the conclusion of these meetings, the Workgroup was unable to reach consensus on the most significant issues.[55]

Xcel explained that it had attempted to overcome this barrier, first by enabling more comprehensive discussions and adding an additional meeting beyond the initial schedule, and second, by engaging a professional third party facilitator. Even with the benefit of a facilitator, Xcel stated that consensus could not be achieved.[56]

Xcel stated that the CSG program had nearly 560 MWs of proposals in the application queue at the time of its filing and the number was growing daily.[57] Because the important issue of eligible garden size was unable to be resolved in the Workgroup, Xcel stated it will implement the CSG program consistent with the CSG statute and related Commission Orders. Xcel explained that the program must be implemented in accordance with the express terms and intent of the authorizing legislation and the legislation's history, and accordingly, it will administer its program as such. In particular, Xcel stated that:[58]

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[52] *Id.*, p. 2.

[53] *Id.*, Xcel Supplemental Comments and Notice of Program Administration, April 28, 2015, p. 3.

[54] On March 10, 2015, in response to Xcel's February I 0 Comments and March 4, 2015 Reply Comments, regarding the administration of the Company's Community Solar Garden (CSG) program, the Commission's Executive Secretary issued a Letter stating the Commission will not take action at this time and the Commission's Orders in the docket remain unchanged. The Letter explained that the Commission expects to more fully evaluate program implementation in late spring or early summer 2015 and potential adjustments, if any, to the program would be fully evaluated at that time.

[55] Docket No. E-002/M-13-867, Xcel Supplemental Comments and Notice of Program Administration, April 28, 2015, pp. 2-3.

[56] *Id.*, p. 3.

[57] *Id.*

[58] *Id.*, p.8.

- All existing or new applications which propose co-located gardens with an aggregate capacity greater than one MW will be scaled to one MW.
- Xcel will process applications for co-located gardens provided that, in the aggregate, they do not exceed one MW.
- Xcel will also process applications from multiple individual (unaffiliated) developers who propose co-located sites provided the gardens from any single developer do not exceed one MW in the aggregate. If multiple developers arrange a host of garden swaps to aggregate a series of sites to establish utility scale solar efficiencies, Xcel will treat the developers as affiliates or partners. In short, Xcel will reject developer efforts to arbitrage the statute.
- Xcel not process applications for projects in excess of one MW where it is simply dividing up a utility-scale project into multiple smaller gardens.

To implement this approach, Xcel stated it will notify applicants to the CSG program (whether new or existing) whose projects do not comply with the one MW limit. In practice, this will usually mean that the first eligible MW of co-located sites will be allowed to advance and CSG program applications for the second, third (and so forth) MWs will trigger a rejection and cancellation notification. Xcel stated it will then issue a full refund of the applicant's deposit, application fee, and engineering fees paid to the Company to date for the applications which in aggregate exceed the one MW standard.[59]

In its Supplemental Comments, Xcel again explained that the types of projects being proposed by developers for the CSG program have been of concern since the very first applications were received, because developers proposed projects that look and act like utility-scale solar projects, and at the same time the participant credit has been set at a value intended to facilitate the financing of much smaller community-based projects. Xcel stated this mismatch in size and price is problematic, because (1) the purpose of this program is to facilitate community-sized solar projects (which are one MW in size or smaller) and (2) all of Xcel customers will pay more if utility-scale solar projects continue to move through the CSG Program.[60]

Xcel stated further that, based on the current volume of applications, the proposed CSG resource is equivalent to a large generating unit. Xcel added that, typically when it adds a resource of this size to its system, it will engage in a robust regulatory process, and it will undertake competitive bidding and the result of that process is that Xcel will select the best bid and customers will receive the most cost-effective resource.[61]

Legislative and Regulatory History and Policy Analysis – As noted in its other Comments, Xcel stated that there is abundant evidence that the Legislature did not intend to promote large utility-scale solar projects but rather intended the one MW limit to serve as a real and enforceable

[59] *Id.*, pp. 8-9

[60] *Id.*, p. 2.

[61] *Id.*

constraint on the types and sizes of projects that received favorable rate treatment afforded to community solar gardens. [62]

Xcel also noted that none of the Commission's prior orders in this proceeding have addressed the issue of the permissible size of co-located community solar gardens. The Commission's April 7, 2014 Order noted "The solar-garden statute limits a garden's nameplate capacity to one MW or less" and expressly required Xcel Energy to amend the solar-garden tariff to define the maximum solar-garden capacity as no more than one MW AC. In its September 17, 2014 Order Xcel stated the Commission restated the one MW capacity limit and expanded the definition of "community solar garden site" to expressly allow garden sites located in close proximity to one another to share in distribution infrastructure. However, Xcel stated the Commission did not address the application of the one MW statutory capacity limit to the situation of co-located gardens. According to Xcel, the Commission has not issued any order authorizing multiple one MW community solar gardens to be co-located, nor does Xcel believe it could do so without directly violating the plain language of the CSG statute.[63]

However, Xcel noted that the Commission has addressed the broader policy and statutory purpose behind the sizing of eligible gardens. Xcel stated that its proposed program administration actions are consistent with and give effect to all of the Commission's Orders, including its February 13, 2015 Order. There, the Commission stated:[64]

> The Commission also declines to adopt any definition of "customer" that would contravene the clear statutory intent to encourage broad community participation in solar gardens. The Commission is sympathetic to the predicament of larger customers, such as school districts, who wish to offset their entire electricity usage but are prevented from doing so by the 40% rule. However, fully offsetting energy use is not the primary purpose of a solar garden program. If it were, the statute would not cap solar garden size, set a minimum number of subscribers per garden, or limit a subscriber's share of garden output to 40%. These restrictions appear instead to serve the statutory purpose of ensuring that solar gardens are accessible to a broad cross-section of the community.

As the Commission's Orders are silent on addressing the application of the one MW limit onto co-located gardens but do address the statutory purpose of the one MW sizing provision, Xcel stated that its program implementation actions are consistent with the CSG statute and the Commission's Orders.

FERC Pricing Issue - Xcel stated that after its review of FERC-related concerns it believed that two aspects of the CSG program could violate FERC rules. The first, which it had discussed in Xcel's February 10 Comments, is the mandate to buy energy from an aggregated CSG of 20

[62] *Id.*, pp. 9-10.

[63] *Id.*, p. 10.

[64] *Id.*, pp. 10-11.

MWs or greater. The second is whether the average retail rate plus a REC value exceeds avoided costs. Xcel also stated that while both of these FERC issues do not apply to proposed CSGs that are consistent with the legislative intent, it does believe it is important the Commission understand some of these potential federal law conflicts as it considers expected comments from developers regarding its noticed administration of the program.[65]

D. Parties Supporting Xcel's Implementation Plan

Several parties expressed at least partial agreement with Xcel's interpretation of the statutes, Commission Orders and its plan for implementing the CSG program. These included the City of Monticello, the Town of Big Lake, Minnesota Chamber of Commerce, Clean Energy Collective, Kandiyo Consulting, LLC., Novel Energy Solutions, NextEra Energy Resources, LLC., Sundial Solar, TruNorth Solar and the OAG.

In addition, several public comments appeared to at least partially support Xcel's interpretation of the statute and its plan for implementing the CSG program, including the representatives from the St. Paul, Minneapolis, Eden Prairie, St. Cloud, White Bear Lake Chambers of Commerce and Catholic Charities.

1. Public Comment

The Chamber of Commerce (CoC) from several communities urged the Commission to enforce the one MW limit on gardens to make sure the program is implemented correctly and does not unfairly raise rates on rate-payers who do not choose to participate in these gardens. The Minneapolis, St. Paul, White Bear Lake, Eden Prairie and St. Cloud CoCs all expressed concern that the CSG program is unfolding in a way that is not consistent with the policy intent and, as a consequence, will unnecessarily increase energy rates on its members who are not participating in a Solar Garden. According to the CoCs, non-participating customers should not be forced to subsidize the Solar Garden proposed large scale projects and new solar resources should be acquired at the lowest possible cost.[66]

Catholic Charities of St. Paul and Minneapolis (Catholic Charities) also urged the Commission to carefully consider the implementation plan for Xcel and its concerns in regard to co-located CSGs. While Catholic Charities stated it believes strongly in environmental stewardship and continued progress toward the use of renewable resources such as solar, it stated that it is critically important that progress not come at the expense of those most in need who cannot afford to subsidize or cross-subsidize with higher utility rates those who might otherwise benefit from investments in solar energy.[67]

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[65] *Id.*, p. 11.

[66] *Id.*, *See* Public Comments, May 19, 2015.

[67] *Id.*

Northfield Area Community Solar (NACS), an LLC formed by Northfield area residents and described as interested in renewable energy as an option for their community, filed public comments emphasizing the "local" and community aspects of CSGs. In addition, four individual potential subscribers to a planned NACS CSG filed additional public comments with similar emphasis.[68]

Concern was expressed over the news of large CSG projects being proposed that link multiple gardens together. It was expressed that developer's pursuit of large co-located projects were seeking to force a loophole in the regulations in ways that undermine the value of "community" written into the Community Solar Garden regulations and that this misuse of the size of CSG projects has the potential to elbow out the smaller, truly community-based projects in the approval process and possibly create problems for the grid.[69]

Comment from a representative of Renewable Energy Partners (REP) also expressed that large, co-located MW CGS's are inconsistent with the original intent of CSG law. According to this comment, the Community Solar Garden program became law as a way for residents of communities to take personal responsibility in lowering their carbon foot print by subscribing to a clean energy source and the intent of the law was not for large co-located solar farms that could ultimately hurt the communities by raising rates, especially low income communities that already struggle with high energy costs.[70]

2. City of Monticello

The City of Monticello asked that the Commission respect the boundaries of municipal development. Specifically, the City asked that the Commission consider the Sunrise Energy solar project, and any other projects within the Monticello Orderly Annexation Area (MOAA), only when it can be shown that the project is designed in a way that takes urban growth factors into account.[71]

The City asked that the Commission accommodate municipal growth factors for the following reasons:[72]

- One Megawatt solar facilities are required to comply with local zoning authority. The aggregation of one Megawatt solar facilities into larger projects removes the facility from local zoning. If aggregation is determined to be acceptable, then it follows that the City should be given local land use authority over the aggregated facility.

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[68] *Id.,* See Northfield Area Community Solar Comments, March 2, 2015. See also, Public Comments, March 4, 2015.

[69] *Id.,* Matt Rohn Comments, March 2, 2015.

[70] *Id.,* Matt Rohn Comments, May 19, 2015.

[71] *Id.* See Public Comments, March 2, 2015.

[72] *Id.*

- Solar energy facilities have the characteristics of rural land uses in that they use no urban services but consume large areas of land.
- Solar energy facilities generate public revenues required to support urban services at a rate far below the needs of the City to maintain and plan for needed new infrastructure.
- A large solar facility which is not subject to local planning authority creates sprawl that raises costs, or deters fiscally sound urban development altogether, putting existing infrastructure investment at risk, and interfering with solutions to existing problems.
- Developers of large solar energy facilities have numerous options for development in rural areas, where their locations would avoid the problems associated with usurpation of land planned for urbanization.

The City of Monticello stated it is a supporter of the CSG program if implemented with the ability for local government to actively participate in their planning and location. The City also stated it believes that large solar array proposals, some of which may be seeking exemption from local land use controls through the 50 megawatt threshold, have the potential to interfere with the efficient provision of municipal services, raise costs to local taxpayers, and potentially leave large areas undevelopable due to increased costs of services. In addition, the City stated it believes that solar energy facilities at larger scales than the one MW CSG may be able to fit within an urban pattern, but only when the local government has the ability to be an active participant in site selection and integrate such facilities into urban services planning.[73]

The City stated it is aware that at least two large Co-located CSG facilities are seeking permits in the Monticello area, and others are seeking land agreements to add their request to the queue. For example, the City stated a request by Sunrise Energy Ventures consists of 400 acres of solar panel arrays on the City's immediate western boundary, and fully within the territory designated for future urban growth in the MOAA. The City also stated that Sunrise considers its proposal a cluster of more than fifty independent one MW CSGs, for the purposes of being eligible to participate in Xcel's CSG program. By aggregating the clusters, and submitting the proposal as a single application, the City's understanding is that Sunrise may be able to avoid local land use regulations.[74]

3. Town of Big Lake

Big Lake Township (Big Lake) stated it refutes the concept of linking together 50 one MW panels for the purposes of Xcel's CSG program. According to Big Lake, this is an unacceptable use for large open tracts of agricultural farm fields. In addition, Big Lake stated solar facilities should be subject to a permit process and to local regulation. Big Lake stated the attempt by companies to use state mandates as a method of circumventing local controls is a concern. Finally, Big Lake stated its concern regarding the possibility of residential electrical rates increasing due to large co-located CSG projects that give specific entities and commercial groups an opportunity to buy power at a lower cost.[75]

[73] *Id.*

[74] *Id.* See also footnote 31 above.

[75] *Id.*, Town of Big Lake Comments, March 31, 2015.

4. Minnesota Chamber of Commerce (MCC)

The Minnesota Chamber of Commerce (MCC) urged the Commission to carefully consider the comments from Xcel and other stakeholders and resolve this issue as soon as practicable. MCC stated its support for Xcel that "there is a way to strike the right balance between moving forward with community solar garden projects while recognizing that approving utility scale projects at CSG rates is not in the best interest of our customers or sustainable for the long-term." MCC supports a CSG program that advances CSG's, but does so in a way that does not force other customers to subsidize CSG participants and ensures that any new solar resources are acquired at the lowest cost possible, given the status of solar technology. According to MCC, Xcel's plan is a way to implement the CSG program without further eroding the competitiveness of Xcel and other affected utilities' rates.[76]

5. Clean Energy Collective (CEC)

Tom Hunt, on behalf of Clean Energy Collective, filed Comments on February 24, 2015, which supported the original legislative intent of the CSG program, which is to allow both small and large subscribers to benefit from community solar. Although developers may not intend to serve solely large customers, CEC claimed that there is a risk that large customers could crowd out individuals and small businesses, because these customers have lower transaction costs. Thus CEC asserted there may be a need for program rules to ensure all customer segments have an opportunity to participate in community solar gardens.[77]

If the Commission finds that Xcel is correct in its assessment that large customers are crowding out participation in the CSG program, CEC suggested that the Commission notify the legislature that the language in statute 216B.1641, requiring "not less than five subscribers in each community solar garden facility of which no single subscriber has more than a 40 percent interest" is likely not strong enough to ensure significant participation from small subscribers. If the current program structure is discouraging smaller potential subscribers, CEC stated it believes the Commission would also be justified in suggesting language modifications to include a broader range of subscribers, or to craft rules to further narrow subscriber's maximum participation.[78]

CEC recommended that the Commission look at the successful example of Massachusetts' Renewable Energy Portfolio Standard, which requires each CSG to have no more than two customers consuming over 25 kW of capacity, with those two customers making up no more than 50% of overall project capacity.[79]

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[76] *Id.*, Minnesota Chamber of Commerce Comments, March 17, 2015, p

[77] *Id.*, Clean Energy Collective Comments in response to the Commission February 13 2015 Notice of Comment Period, February 13, 2015, p 2.

[78] *Id.*, pp. 2-3.

[79] *Id.*, p. 3.

6. Kandiyo Consulting, LLC

Kandiyo Consulting, LLC (Kandiyo) suggested that the Commission consider limitations on the size of projects permitted with common coupling consistent with legislative intent. In the alternative, Kandiyo suggested the Commission consider instituting Xcel's proposed 2015 Value of Solar tariff of .1075 per kilowatt-hour for projects that in the aggregate exceed the one MW limit in the legislative language.[80]

In its April 2, 2015 Comments, Kandiyo stated it believed that large, co-located Community Solar projects of 10 MW or more were inconsistent with the intent of the Community Solar legislation. The fact that most of these projects are also in rural or exurban locations that offer minimal benefits to Xcel's system as distributed generation is also contrary to what Kandiyo stated it believed to be the intended benefits of Community Solar legislation.[81]

7. Novel Energy Solutions (NES)

Novel Energy Solutions stated it supported Xcel's concern over the potential manipulation of the CSG program for the purpose of creating "utility-scale" projects by disguising them as multiple one MW CSGs. NES expressed concerns over the use of the Section 10 process as a way to circumvent the Section 9 Solar*Rewards Community application process. Based on comments and statements at CSG Workgroup meetings and other discussions, NES stated it is a distinct probability that several of the 10 MW or larger Community Solar Garden applications started as Section 10 Interconnection applications prior to the opening of the CSG process.[82]

NES stated that Xcel Energy did not dispute the solar industry request to allow multiple one MW-sized to be placed together for the benefit of "coupling," and NES supported this request within the confines of the Section 10 tariff. However NES stated it would not have been supportive of this request if it had been understood that this request was for the purpose of blatantly circumventing existing tariffs or the community solar garden application process. NES stated it supported efforts to follow existing tariffs and prevent circumvention, and in that regard, NES recommended that multiple one MW or less-sized Community Solar Gardens in the same location be allowed up to the Section 10 tariff amount of 10 MW.[83]

8. TruNorth Solar, LLC (TruNorth)

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[80] *Id.*, Kandiyo Consulting, LLC. Comments in Response to the Commission's May 1, 2015 Notice of Comment Period, May 18, 2015.

[81] *Id.*, Kandiyo Consulting, LLC Comments in Response to the Commission's March 13, 2015 Notice of Comment Period, April 2, 2015

[82] *Id.*, Novel Energy Solutions Comments in Response to the Commission's February 13 Notice Seeking Comments, February 24, 2013.

[83] *Id.*

Similar to NES, TruNorth requested that the Commission impose a 10 MW limit to co-locating CSGs. TruNorth stated that this is consistent with the Department of Commerce[84], other CSG developers, and Xcel's section 10 tariff. TruNorth stated that without these limits, those who have pursued distributed community solar projects consistent with the spirit and intent of the law will be unfairly harmed.[85]

TruNorth agreed with Xcel that in enacting the CSG statute, and compelling an above market rate that Xcel must pay for the energy produced by them, the legislature did not intend CSGs to turn into utility-scale solar farms occupying literally hundreds of green field acres. TruNorth characterized co-located CSGS greater than 10 MW as "plain and simple, corporate solar farming."[86]

TruNorth Solar stated it believes that the ARR+REC rate ordered by the commission unfairly compensates for the energy produced by systems benefiting from the natural economies of scale over 10 MW.[87] According to TruNorth, if the legislature had wanted to build more than 500 MW of solar in the state before expiration of the federal 30% investment tax credit, it would have chosen a different vehicle than CSGs limited to one MW per garden. TruNorth also agreed that the program was not intended to require Xcel to pay $.12/kwh for a 50 MW facility that, for all intents and purposes, looks identical to another 50 MW solar project for which, based on competitive bids submitted, it pays one-third (or more) less for the identical solar energy.[88]

In addition, TruNorth stated that if co-located and common-coupled projects greater than 10 MW in size are allowed to move forward, engineering study timelines will dramatically delay the small CSGs, resulting in very few or even no community solar projects completed in the 2015 and 2016 construction season. According to TruNorth, this would be a disaster for the local economy and bad for Xcel Energy customers who are counting on these projects and their local benefits.[89] TruNorth Solar stated that the interconnection delays are directly related to the large volume of common-coupled and large-scale projects being submitted by solar developers to the CSG program.[90]

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[84] The Department proposed a 10 MW limit for co-located CSGs in its February 24, 2015 Comment in Response to the Commission's February 13, 2015 Notice Seeking Comments. In its April 2, 2015 Reply Comments, the Department withdrew its proposed 10 MW limit.

[85] Docket No. E-002/M-13-867, TruNorth Solar, LLC. Comments in response to the Commission's May 1, 2015 Notice of Comment Period , May 18, 2015. P. 3.

[86] *Id.*, p. 1.

[87] *Id.*, p. 3.

[88] *Id.*, p. 1.

[89] *Id.*, p. 2.

[90] *Id.* TruNorth Solar, LLC. Revised Reply Comments in Response to the Commission's March 13, 2015 Notice of Comment Period, May 1, 2015, p. 1.

Should the Commission decide that co-located projects over 10MW in size are allowable, TruNorth Solar suggested that the Commission allow Xcel Energy to review these projects through a competitive bid process similar to the competitive solicitation process used by Xcel Energy for large utility-scale solar procurements and its Colorado Solar*Rewards Community program for larger CSGs.[91]

9. NextEra Energy Resources, LLC (NEER)

NextEra Energy Resources, LLC. (NEER) described itself as active solar developer in Minnesota that currently has an application for a site permit for the 62.25 MW Marshall Solar Project pending before this Commission. NEER stated it shares the concern expressed by Xcel that interpretations of legislative intent have led to a plethora of CSG applications whose designs contradict the program requirements.[92]

According to NEER, the relevant statute provides that "[t]he solar garden must have a nameplate capacity of no more than one megawatt" and Xcel's tariff and standard contract reflect the statutory one MW limit as well. Further, NEER emphasized that the Commission has reinforced Xcel's interpretation of the one MW limit. The Commission's April 7, 2014 Order noted "The solar-garden statute limits a garden's nameplate capacity to one MW or less" and expressly required Xcel Energy to amend the solar-garden tariff to define the maximum solar-garden capacity as no more than one MW.[93]

NEER stated that it, like Xcel and perhaps other developers, incorporated the statute's one MW size limitation in its planning and proposals, and therefore excluded co-location of facilities above the one MW limit. Because some developers are interpreting the one MW limitation differently, NEER stated that an un-level playing field is created due to the fact that larger projects may be able to take advantage of better economics.[94]

10. Sundial Solar (Sundial)

Sundial Solar supported Xcel and its announcement of April 28 in which it plans to disallow applications for community solar gardens of more than one MW per site. According to Sundial, the original legislation's intent was clearly to support a community – oriented approach to the development of solar gardens by imposing a one MW limit to the size of any one array. Sundial expressed that large solar arrays, as proposed by Sun Edison, SoCore, SunShare, TruNorth, and others, are clearly not within the intent of the original legislation. Sundial clarified that although there is a need for large multi-megawatt solar farms and there should be a mechanism to provide

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[91] *Id.*, p. 3.

[92] *Id.*, NextEra Energy Resources Comments in Response to the Commission's May 1, 2015 Notice of Comment Period, May 15, 2015, pp. 1-2.

[93] *Id.*, p. 2.

[94] *Id*

for them, to allow these large arrays into Xcel's CSG program is neither within the original legislative intent nor in the public interest.[95]

11. The Office of the Attorney General – Residential Utilities and Antitrust Division (OAG)

In its March 4, 2015 Reply Comments, the OAG expressed concern that the CSG program, as currently structured, could cause significant cost increases for residential and small business customers, and may cause these customers to pay large subsidies for solar garden facilities that predominantly benefit large customers. The OAG encouraged the Commission to carefully consider these potential effects of the CSG program, to monitor the program closely as it develops, and to make appropriate modifications as necessary to ensure that residential and small business customers are not unfairly impacted.[96]

The OAG stated that it appears undisputed that the CSG program will cause some increased energy costs for customers that do not subscribe to a solar garden, although there is dispute over the level of these increased costs. OAG stated it appears that the residential and small business service classes would bear the brunt of any increased costs that are realized. The OAG noted that, based on media coverage and anecdotal knowledge, Xcel anticipates that the majority of the CSG subscriptions already sold will go to large commercial or industrial customers—another claim that does not appear to be disputed. According to the OAG, these large customers are likely more appealing to solar garden operators, since they consume greater quantities of energy and provide operators with a single point of contact, allowing them to sell numerous subscriptions with limited marketing. However, by selling subscriptions exclusively or primarily to large customers, the OAG cautioned that these developers funnel the benefits of the CSG program's high bill credits to these classes, while requiring members of those classes left out of the subscription process to subsidize these high costs. [97]

In response to parties' suggestions that large customers serve as "anchor tenants," the OAG contended that no evidence has been submitted suggesting that CSG operators will first attempt to secure an "anchor tenant" from the large commercial and industrial classes and then, once that tenant is secured, shift their marketing to low-use residential and small business customers. The OAG stated it seems more likely that solar garden operators who sell subscriptions to one or more large customers will continue to market to other large customers for the remaining capacity of their gardens, because large customers provide the same benefits to developers regardless of whether they are the first, second, or tenth customer of a CSG facility. [98]

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[95] *Id.*, Sundial Solar Comments in Response to the Commission's May 1, 2015 Notice of Comment Period and Xcel's April 28, 2015 Supplemental Comments, May 4, 2015.

[96] *Id.*, The Office of the Attorney General – Residential Utilities and Antitrust Division Reply Comments in Response to the Commission's February 13, 2015 Notice Seeking Comments, March 4, 2015, p. 1.

[97] *Id.*, pp. 2-3.

[98] *Id.*, pp. 3-4.

In its April 30, 2015 Reply Comments the OAG recommended that the Commission establish a baseline of how much CSG capacity will be brought online in each year, and limit the amount of harm that will be shifted to non-participants as a result of the CSG program. The OAG warned that it is not clear that the CSG program will achieve its goals as currently designed and that the CSG program may not have been designed for the number and size of solar gardens currently proposed.[99]

Despite the fact that the CSG statute limits the size of solar gardens to one MW, developers have proposed co-located gardens that are many times larger than one MW. The OAG stated that the unanticipated size of these developments is problematic because it encourages developers to shift the focus of the CSG program to large energy consumers, rather than individuals and community organizations. In addition, the OAG stated that the scale of CSG developments may lead to significantly greater costs than were anticipated for the CSG program, and make it difficult to interconnect the CSGs efficiently or plan Xcel's future mix of resources.[100]

The OAG claimed the CSG program creates inequitable costs for non-participants, because Xcel is required to accept the solar generation from approved CSG developments and provide bill credits to ratepayers with CSG subscriptions. OAG added that because the costs of these bill credits will be collected from all ratepayers through the fuel clause adjustment, the increased costs will go to support operation of the program, which provides no direct benefit to the non-participant ratepayer.[101]

Due to the CSG's current structure, the OAG stated the level of harm to non-participants is directly related to the bill credit rate set by the Commission and the higher the bill credit rate, the more costs that will be shifted from CSG participants to non-participants. Given the number of applications submitted by CSG developers, the OAG claimed the CSG program may lead to rate increases for non-participants that are inequitable. The OAG stated further that, even assuming that only a portion of the proposed 560 MWs of projects become operational, the large volume of CSG applications could lead to a significant and unanticipated rate increase. Moreover, the OAG noted that given the interest in the CSG program, it appears likely that Xcel will continue to receive CSG applications for the foreseeable future.[102]

In addition to the inequities that would result from rate increases to non-participants as a result of the CSG program, the OAG warned that the scale of CSG applications has also shifted the benefits of the CSG program to large energy consumers. As an example, the OAG cited a recent newspaper article that reported Macalester College plans to purchase dozens of solar garden subscriptions in an attempt to completely offset its energy expenses. Representatives of

[99] The Office of the Attorney General – Residential Utilities and Antitrust Division Reply Comments in Response to the Commission's March 13, 2015 Notice of Comment Period, April 30, 2015, p. 2.

[100] *Id.*, p. 19.

[101] *Id.*, p. 4.

[102] *Id.*, pp. 4-5.

Macalester reported that they viewed the solar gardens as a "straightforward hedge against increases in electric rates," because they could lock in a solar electricity rate for 25 years. The College indicated that it expected its electricity costs to be one-third less than normal rates by the tenth year of the program. St. Olaf College has a similar agreement with different solar garden developers.[103]

The OAG cited another recent newspaper article which indicated that even other electricity providers are pursuing CSG contracts. St. Paul based District Cooling, which provides electricity to downtown businesses, plans to offset 50 percent of its energy consumption through solar garden contracts with SunEdison. Additionally, large industrial customer Ecolab has reached a deal with SunEdison to "offset virtually every watt of electricity used in its Minnesota business operations." Ecolab alone is planning to purchase more solar through the CSG program than is currently installed in the entire state. The OAG noted that any cost savings to these customers will be collected from Xcel's remaining ratepayers.[104]

As the OAG described, the scale of the proposed CSG projects proposed thus far affords large companies the opportunity to offset their entire energy use and receive a bill credit that is currently designed to be greater than their full retail rate. The impact of this is that these large subscribers may receive bill credits that are equal to, or possibly greater than their electric bills—and all of those costs would be paid for by Xcel's other ratepayers. According to the OAG, the result is a direct subsidy from non-participants to pay for the program.[105]

According to the OAG, the CSG program was not intended to create a subsidy of this kind and the Commission clearly identified this in its February 13, 2015 Order, where it stated that "Fully offsetting energy use is not the primary purpose of a solar-garden program. If it were, the statute would not cap solar-garden size, set a minimum number of subscribers per garden, or limit a subscriber's share of garden output to 40%. These restrictions appear instead to serve the statutory purpose of ensuring that solar gardens are accessible to a broad cross-section of the community."[106]

The OAG also claimed that the CSG program does not allow for efficient planning and it warned that larger CSG projects will increase the complexity and uncertainty of Xcel's resource planning to a significantly greater extent than the one MW community projects that were initially contemplated in the CSG program. The OAG stated that allowing third-party developers to propose hundreds of megawatts of solar outside of the Commission's resource planning process could (and almost certainly will) lead to inefficiencies in the resource planning process. Additionally, the OAG noted that the Commission uses its resource planning authority to ensure that Xcel pursues least-cost generation assets, and the company has recently demonstrated that it

[103] *Id.*, p. 5.

[104] *Id.*, pp. 5-6.

[105] *Id.*, pp. 6.

[106] *Id.*

can acquire utility-scale solar resources at a significantly lower cost than the ARR that will be paid for CSG generation.[107]

The OAG suggested the Commission should take steps to eliminate or limit nonparticipant harm to control the impacts of the CSG program. According to the OAG, the bill credit rate for CSGs has incentivized demand for the CSG program to a significantly greater level than otherwise would have occurred and it has also opened the door for large energy consumers to sign 25 year contracts to offset the majority of their energy use at guaranteed rates—with any cost savings for these customers to be paid by non-participants. Because the CSG program, as currently designed, pushes an unlimited amount of costs from participants to non-participants, it shifts the benefits of the CSG program to large energy consumers and does not allow for efficient resource planning. The structure of the CSG program is not consistent with the public interest.[108]

In regard to Xcel's proposed implementation plan as described in its April 28, 2015 Supplemental Comments, the OAG stated it had a few concerns. The OAG stated it is unclear what process Xcel will use in determining whether CSG facilities in close proximity violate the CSG statute's one MW limitation. In addition, the OAG claimed that Xcel's proposal could unintentionally grant competitive advantages to Xcel if, or when, it chooses to enter the CSG market.[109] The OAG stated Xcel may wish to enter into the CSG market or offer a "new product" at some time in the future and permitting Xcel to administer co-location criteria in a program in which it has a financial interest could be problematic.[110]

Instead, the OAG recommended that the Commission determine parameters to designate the limitations to non-participant harm. Specifically, the OAG recommended the Commission should act immediately to limit the amount of non-participant harm caused by the CSG program that will be permitted in a calendar year, based on average bills for each customer class. The OAG stated that when the increase to ratepayers' average bills from CSG costs exceeds that level, the Commission should order Xcel to stop processing CSG proposals until the next time period. According to the OAG, controlling the costs to ratepayers for the CSG program will allow the CSG program to grow at a measured pace without pushing an unlimited amount of costs from subscribers to nonparticipants.[111]

The OAG stated it believed it is reasonable to base the threshold for non-participant harm on average bills because that is the best measure of the real-world impact for Xcel's ratepayers. Additionally, the OAG suggested the Commission should determine a stage of development at which a CSG program would be included in the metric (for example, at the stage that the developer receives a final notice to proceed) to determine how the metric should operate. Finally, the OAG suggested that the Commission should consider all factors, including the

[107] *Id.*, p. 7.

[108] *Id.*, p. 22.

[109] *Id.*, pp. 20-21.

[110] *Id.*, pp. 21.

[111] *Id.*, pp. 22-23.

requirement that the CSG program be consistent with the public interest, the requirement that all rates be just and reasonable and that all doubt as to reasonableness be resolved in favor of the consumer, and the requirement that rates be non-preferential and non-discriminatory in setting the limit on nonparticipant harm.[112]

While the Commission has previously rejected a request by Xcel to limit the speed of investment for the CSG program, the OAG stated its recommendation is significantly different. Specifically, the OAG claimed the Commission rejected Xcel's request that the program be limited to 10 MW per year because the Commission did not want to create "the potential to delay the growth of solar gardens and limit opportunities for subscribers." According to the OAG, while Xcel's proposed limitation could have limited the growth of the CSG program, setting a minimum requirement would ensure that the CSG program begins, and continues, to grow. Therefore, the OAG stated the limit on non-participant harm would not raise the same concerns as Xcel's previous recommendation. Furthermore, the OAG stated that at the time the Commission rejected Xcel's previous proposal, the extent of interest in the CSG program was not yet clear.[113]

The OAG noted also that limiting harm to non-participants is permitted by the CSG statute. Minnesota Statutes section 216B.1641 provides that, "There shall be no limitation on the number or cumulative generating capacity of community solar garden facilities other than the limitations imposed under section 216B.164, subdivision 4c, or other limitations provided in law or regulations." First, according to the OAG, limiting non-participant harm is not a limitation on the cumulative capacity of the CSG program, because it does not place a limit on how much CSG capacity can be created. Instead, it controls the timing of when CSG capacity can be brought online in order to limit harm to non-participants, provide greater certainty to all involved parties, and to provide better integration with Xcel's resource planning.[114]

Secondly, the OAG pointed out that even if the Commission believed that limiting non-participant harm was a limitation on cumulative generating capacity, the language of the CSG statute clearly gives the Commission the authority to take this step. The statute provides that there may be no limitations on cumulative generating capacity, except for "other limitations provided in law or regulations." According to the OAG, Commission action is the definition of "regulation," and "regulation" on this issue is clearly contemplated by the CSG statute.

Finally, the OAG stated that the CSG statute also requires the CSG program to be "consistent with the public interest," and the Commission's general grant of authority requires the Commission to set rates that are "just and reasonable." A CSG program that permits unlimited harm to non-participants is not consistent with the public interest, and does not lead to just and reasonable rates and therefore, the OAG reasoned, the Commission must have the authority to limit the timing of CSG development for this purpose.[115]

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[112] *Id.*, p. 23.

[113] *Id.*, pp. 24-25.

[114] *Id.*, p. 25.

[115] *Id.*, pp. 25-26.

In addition to eliminating or limiting non-participant harm, the OAG recommended that the Commission should establish a requirement that Xcel approve a minimum amount of CSGs in each calendar year. According to the OAG, setting a minimum requirement would provide significantly more certainty for the CSG program overall. The OAG stated the purpose of establishing a minimum requirement would not be to drive Xcel to incentivize developments, but rather to reduce Xcel's incentives to inhibit the program's growth.[116]

According to the OAG, requiring Xcel to bring a minimum amount of CSG online would give Xcel incentives to resolve interconnection disputes by providing developers with timely and accurate information. In addition, the OAG stated it would also incentivize Xcel to resolve disputes related to co-location, and mitigate Xcel's anticompetitive incentives. Furthermore, the OAG stated that setting a minimum requirement would significantly smooth out the pace of CSG development and allows a more predictable pace for the CSG program. This would provide certainty to the Commission, CSG developers, and ratepayers. Finally, the OAG stated that with both a limitation on non-participant harm and a minimum development requirement, the Commission would have significantly more control over the impacts of the CSG program, and more information about how it integrates into Xcel's resource planning.[117]

The OAG stated that by establishing a baseline of how much CSG capacity will be brought online in each year, and limiting the amount of harm that will be shifted to non-participants, CSG developers, Xcel, and the Commission will all have more certainty about the future of the CSG program and how it relates to Xcel's existing generation portfolio. The OAG advocated that this combination of recommendations is a reasonable short term solution to some of the problems with the CSG program for the following reasons:[118]

1) The non-participant harm metric would be easy to administer and would not require the Commission to change the rate;
2) Establishing a minimum CSG requirement may address some problems related to disputes about co-location and mitigate Xcel's anticompetitive incentives regarding the CSG program;
3) Establishing a minimum requirement would incentivize Xcel to resolve interconnection information to developers, which may reduce the costs of CSG development and improve the efficiency of integrating CSG into Xcel's system;
4) Restricting the amount of non-participant harm may address another unintended consequence caused by the CSG program—uncertainty;
5) More certainty about the pace of CSG development would allow Xcel to incorporate the CSG program more fully into its resource planning and allow the Commission to make informed decisions about selecting resource portfolios and accomplishing emissions mandates; and

[116] *Id.*, pp. 23-24.

[117] *Id.*, p. 24

[118] *Id.*, pp. 26-27.

6) Setting a CSG investment floor would help accomplish the Commission's goal of ensuring that developers can take advantage of federal tax credits before they expire at the end of 2016.

In its May 18, 2015 Comments, the OAG cautioned that the Commission should consider the CSG program holistically as it considers making changes, since a change to one aspect of the program will have an impact on other aspects. For instance, as the OAG explained in its previous comments, the rate necessary to spur CSG developments is directly tied to the expected costs for developers; if the costs to developers can be reduced, then the bill credit rate can also be reduced to produce lower costs for non-participants while still maintaining an economically viable facility. Different parties have made a variety of recommendations that would impact the cost to developers and the bill credit rate for subscribers and the OAG cautioned further that considered in isolation, these recommendations may cause further problems to achieving the goals of the CSG program and minimizing the negative impacts on non-participants.[119]

E. Parties Opposed to Xcel's Implementation Plan

Several other parties disagreed with Xcel's plan for implementing the CSG Program and considered its plan a clear violation of Commission Orders, including the Metropolitan Council, St. Paul Housing Authority, Fresh Energy, Environmental Law & Policy Center, Institute for Local Self-Reliance, Izaak Walton League of America, Interstate Renewable Energy Council, Minnesota Center for Environmental Advocacy, the Sierra Club, MnSEIA, Minnesota Community Solar, SunShare, Sunrise Energy Ventures, Solar Gardens Community, and the Department.

1. Solar Garden Community

The Solar Garden Community (SGC) is a consortium of solar businesses that include BHE Renewables, LLC; SoCore Energy, LLC; SunEdison, LLC; Sunrise Energy Ventures, LLC; and SunShare, LLC. On April 29, 2015 SGC filed a Petition for Expedited Relief in response to Xcel's Supplemental Comments and asked the Commission to enforce its prior orders and issue another order putting Xcel Energy on notice that Xcel Energy's proposed actions in its April 28 Supplemental Comments would be a violation of the CSG Program Approval Order.[120]

In the SGC's February 24, 2015 Comments in response to Xcel's February 10 Letter to the Commission highlighting specific concerns of co-located CSGs, SGC stated it would be unnecessary and highly premature to take action on Xcel's claims before the CSG Program has had a chance to begin.[121] SGC urged the Commission to let the CSG Program as designed play out more fully. SGC stated it was troubled by Xcel's Letter, because the concerns raised in it are

[119] *Id.*, The Office of the Attorney General – Residential Utilities and Antitrust Division Comments in Response to the Commission's May 1, 2015 Notice of Comment Period, May 18, 2015.

[120] *Id.*, The Solar Garden Community's Petition for Expedited Relief, April 29, 2015, p. 8.

[121] *Id.*, The Solar Garden Community's Comments in response to the Commission's February 13, 2015 Notice Seeking Comments, February 24, 2015, p. 15.

premature and could be profoundly disruptive to the CSG Program. SGC elaborated that Xcel's Letter could upend expectations and stifle development through unwarranted delay. SGC stated further that time is of the essence to capture expiring federal tax benefits, and any delay at this juncture could stifle the CSG Program before it has had a chance begin.[122]

The SGC noted the Commission's stated intent to maximize CSG development in its April 7, 2015 Order:[123]

> A capacity limit holds the potential to delay the growth of solar gardens and limit opportunities for subscribers to participate in the program. Allowing maximum garden development in the early years of the program is particularly critical to allow developers to take advantage of the federal Investment Tax Credit before it expires.

According to the SGC, all parties, including Xcel, paid particularly close attention to the CSG site definition throughout the docket and program development. SGC explained that after the Commission determined the CSG site definition should correspond to the point of common coupling rather than a particular parcel of real estate, multiple parties expressed an interest in also making it very clear in the rules that multiple gardens could be co-located to make efficient use of distribution infrastructure and Xcel agreed the definition does not preclude multiple gardens from being located on a single parcel of land provided that each CSG has a separate production meter and interconnection agreement. The Commission concurred in its September 17, 2014 Order which stated "The Commission concurs with Fresh Energy that the definition of 'community solar garden site' should expressly state that solar gardens may be sited near each other in order to share distribution infrastructure."[124]

SGC claimed the CSG Program had its desired effect, which is to spur significant solar development in Minnesota and the roughly 430 MW worth of CSG applications should be afforded the opportunity to proceed through the application process. According to the SGC, most CSGs had been carefully crafted to conform to the CSG statute, the Commission's interpretation thereof, the CSG tariff set forth in section 9 of Xcel's tariff book ("Section 9"), and the specific directions from Xcel. While CSG projects in close proximity may share certain infrastructure, the SGC noted each CSG is a separate, stand-alone generating facility. The SGC explained that designing the CSG projects in this fashion, while complying with the CSG Program, is not an insignificant effort and results in higher costs than a developer would incur when developing utility-scale solar.[125] The SGC claimed Xcel's Letter frames these projects as "utility-scale" in a renewed effort to draw criticism and question legislative intent. However, the SGC noted that Xcel's Letter does not acknowledge that these developers are following program rules.[126]

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[122] *Id.*, p. 2.

[123] *Id.*, p. 4.

[124] *Id.*, pp. 4-5.

[125] *Id.*, pp. 5-6.

[126] *Id.*, p. 6.

In response to Xcel's a concern that CSGs are being built to the exclusion of certain classes of subscribers and in a way that is also contrary to legislative intent, the SGC stated that nowhere in the CSG statute is there any limitation or direction on what class or classes of customers are eligible to participate in the CSG Program.[127] The SGC stated that Xcel's concern that large commercial and industrial subscribers will "crowd out" smaller commercial and residential subscribers is based on anecdotal information and way too early in the CSG Program roll-out to be given any credibility. The SGC stated further that it should be relatively unremarkable that developers are identifying their anchor subscribers first.[128]

The SGC stated that Xcel's comments on rate impact are disconcerting for three reasons:[129]

1) Xcel's comments do not fairly recognize the very real benefits of distributed generation that can serve local load without significant transmission use or investment.
2) Xcel fails to recognize that the CSG Program will spur distribution grid upgrades that the developers are solely responsible for funding.
3) Solar serves as an important capacity resource that could function to save Xcel and its ratepayers from having to build new capacity resources in the future.

Instead of recognizing these unique and value-adding attributes of the CSG Program, the SGC asserted that Xcel attempts instead to compare distributed solar to transmission-level solar projects or CSG rates to wholesale energy prices. The SGC stated it believes the legislature thoughtfully provided for this issue by requiring a value of solar calculation that accounts for all the costs and benefits of distributed solar – suggesting that it recognized there are particular differences associated with distributed solar that should be accounted for. Instead, according to the SGC, Xcel's calculation effectively pits unlike things against each other on a narrow cost basis and without recognition of relative benefits and other avoided costs.[130]

The SGC also suggested that the Commission should disregard Xcel's operational concerns in regard to co-located CSGs. The SGC claimed that the freedom to maximize development in one MW increments – co-located or not – should result in an optimum pairing of solar gardens to meet local load. The SGC claimed further that whether the proposed CSGs are in close proximity or spread apart is essentially irrelevant because the number of CSG applications that could be approved is unlimited.[131]

In addition, the SGC stated that the interconnection process itself will help guide developers toward pursuing CSG projects where there is sufficient capacity and load. According to the SGC, Xcel agreed to study multiple CSGs proposed in the same location, provided each CSG has a

[127] *Id.*, p. 7.

[128] *Id.*, p. 8.

[129] *Id.*, p. 9.

[130] *Id.*

[131] *Id.*, p. 10.

distinct interconnection application and provided that the Section 10 timelines for review be based on the size of the group of CSGs as opposed to the 40-day limitation for projects sized one MW or less. The SGC cited the minutes from the October 29, 2014, implementation workgroup which it stated reflects this discussion and agreement:[132]

> *Multiple CSGs in the same location*
> Operators may notify Xcel Energy within their application that they have more than 1 CSG in close vicinity and request that those be studied together for the purposed [sic] of determining interconnection costs. The CSGs must still have distinct points of common coupling and distinct IAs. If projects are studied together, the Section 10 timelines for the size of the overall study apply rather than the 1 MW or under timelines.

The SGC also asserted that Xcel's reference to MISO and PURPA are red herrings. According to SGC, the CSG Program is a distribution level program, interconnecting into Xcel's distribution system, and the interconnection process under Section 10 is designed to avoid backflow onto the transmission system that is the jurisdiction of MISO. In addition, the SGC claimed Section 10 is designed to be self-regulating, because there are points in time during the interconnection process when the CSG applicant will be forced to make a decision to proceed or drop out. Therefore the SGC stated that this trial and error approach will work, and any operational issues will be self-regulating.[133]

In its March 4, 2015 Reply Comments, the SGC continued to stress the need to help encourage the CSG Program to proceed forward as designed. The SGC claimed that the process, as designed, will yield valuable data on the overall program costs and benefits, the quantity of CSGs actually pursued, the initial rate impact whether it be positive or negative, the type of project being pursued under the current rate structure, and the subscribers benefitting from the program. According to the SGC, these will be immensely helpful data points to continue to adjust the program prospectively to better meet the legislative intent and other state goals or priorities.

Conversely, the SGC claimed that using anecdotes to draw premature conclusions could easily drive unintended and unfortunate consequences before the program has even had a chance to succeed.[134]

In response to Xcel's concerns for utility-scale solar, the SGC stated that, there are no 2, 6 or 26 MW CSG projects in Xcel's associated queue; there are only CSGs sized one MW or less.

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[132] *Id.*, p. 13.

[133] *Id.*, pp. 13-14.

[134] *Id.*, The Solar Garden Community's Reply Comments in response to the Commission's February 13, 2015 Notice Seeking Comments, March 4, p. 15.

According to the SGC, each distinct one MW CSG must file its own separate interconnect application, pay the associated fees, be reviewed and studied independently, and ultimately have its own interconnection agreement. [135]

SGC acknowledged that there may be a role for MISO to play as Xcel continues its interconnection review under Section 10, if Xcel determines a CSG or group of CSGs after a certain point may impact the transmission system. However, SGC stated that groups of projects should not be arbitrarily removed from Section 10 and "referred" to MISO when no CSG is seeking anything other than distribution level interconnections. Instead, the SGC agreed thoughtful consideration should be given to the interplay between Xcel's distribution system and the transmission system particularly as sizeable amounts of new generation are being contemplated for the distribution system and in an increasingly short timeframe. [136]

The SGC suggested that the Commission should be looking at the best practices for reliably folding the new generation into the current system and that elements of these best practices could be initially addressed in Xcel's Integrated Resource Planning process in the context of reaching Xcel's various renewable and climate goals, or perhaps as part of a second phase of the e21 process that is aimed at transitioning to a new regulatory framework that better handles significant shifts to distributed generation among other things. Alternatively, the SGC suggested it may be that the most efficient way to address updating the interconnection procedures in consideration of significant increases of distributed generation is through a separate docket or proceeding focused on that alone. Although the SGC encouraged such thoughtful and forward-looking deliberation, it urged the Commission to do so in a way that does not hinder the current CSG program in light of the investments that have been made to date and the quickly-closing opportunity to capture federal tax benefits for solar projects.[137]

In its April 2, 2015 Comments, the SGC again stated it is critical for the Commission to reaffirm its prior orders and allow the CSG application process to play out more fully, so that additional information is gleaned from that learning process. [138] Although the SGC stated it understands that any new program will require tweaks as implementation issues arise, the SGC asked that the Commission keep the basic program design whole, with any necessary changes implemented on a prospective-only basis for those that submit applications after the effective date of any future Commission Order. In other words, the SGC requested that if the Commission makes any changes to the CSG Program, it should clearly state that those changes will not affect existing CSG applications.[139]

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[135] *Id.*, pp. 2.

[136] *Id.*, p. 4.

[137] *Id.*, pp. 4-5.

[138] The Solar Garden Community's Comments in response to the Commission's March 13, 2015 Notice of Comment Period, p. 4.

[139] *Id.*, p. 2.

In addition, the SGC claimed that the CSG Implementation Workgroup is not designed to address the issue of co-located gardens and that it is troubled by Xcel's suggestion that the Implementation Workgroup find workable solutions to the problem of co-located CSGs. The SGC stated it is unclear what legal basis Xcel Energy is relying upon to assert that issues that were previously resolved via the substantial work of the parties and the Commission (*e.g.*, CSG size) are now unresolved. The SGC claimed that Xcel should not be permitted to foist additional Implementation Workgroup meetings upon developers simply because it disagrees with the manner in which the Commission previously resolved an issue.[140]

The SGC stated that while this docket is rife with important issues and there is virtually no upper limit of time and resources that could be invested in getting this program perfect, there is a quickly depleting amount of time available to get solar projects built with the current federal tax benefits. Therefore, the SGC suggested that instead of revisiting settled CSG Program design issues at this critical juncture, the Commission should encourage Xcel to move developers through the application process as efficiently as possible in order to capture the federal tax benefits and thus be reasonably financeable at the current rate and per the statutory guidance.[141]

In its April 29, 2015 Petition for Expedited Relief, the SGC requested once again that the Commission enforce its prior orders and issue another order putting Xcel Energy on notice that Xcel Energy's proposed actions in the Supplemental Comments would be a violation of the CSG Program Approval Order. The SGC contended that the issue of co-location was fully discussed in front of the Commission, Xcel previously agreed to the resolution, and the CSG Plan Approval Order carefully balances the Commission's duty to give effect to a statute with many express requirements. The SGC asserted that Xcel's implementation plan would result in irreparable harm to the members of the SGC and to the emerging Minnesota solar market as a whole. The SGC claimed that to the SGC members alone, Xcel's actions would yield tens of millions of dollars in damages even after repayment of the deposits and fees. The SGC stated that while a Commission issued prospectively cap on the co-location of CSGs would be a suitable decision item for the Commission's June hearing, it emphasized that any retroactive changes to the CSG Program will likely result in damages to SGC members and other solar developers and the SGC asked the Commission to take swift action that would avoid such an outcome.[142] The SGC asserted that a chilling effect from Xcel's action would signal to the industry and financing institutions that Minnesota is not a stable regulatory environment in which to invest.[143]

Furthermore, the SGC stated that the Xcel's position is entirely inconsistent with Xcel's prior public statements, both to the Commission and the general public. The SGC noted that Xcel Energy's representative acknowledged during a public hearing on August 7, 2014, that "the structure of the program does allow someone to find a large parcel of land and put several one

[140] *Id.*, p. 3.

[141] *Id.*, pp. 3-4.

[142] *Id.*, The Solar Garden Community's Petition for Expedited Relief, April 29, 2015, p. 8.

[143] *Id.*, pp. 2-3.

MW projects next to each other…"[144] In addition, according to SGC, in its Frequently Asked Questions resource dated February 5, 2015, Xcel stated the following:[145]

> **Is there a limit to the Solar Garden Size?**
> The maximum solar garden system size is 1 MW AC. The system size is based on the sum of the inverter(s) maximum AC output. There is no limit to the number of solar gardens which can be placed on a property, but no single garden can exceed the 1 megawatt PV system cap. While there is no program restriction on multiple gardens in one area, there could be technical limitations that could require expensive distribution system upgrades.

The SGC noted that in its CSG program Approval Order, the Commission defined "community solar garden site" and that the term "Community Solar Garden" is defined elsewhere in the Xcel CSG tariff, which includes a reference to nameplate capacity and location. The SGC stated that the distinction between Community Solar Garden and Community Solar Garden site is both critical and clear. According to the SGC under the Xcel CSG tariff, and consistent with state law, a "Community Solar Garden" is constrained by the statutory one MW limitation, and under the Xcel CSG Tariff, "Community Solar Garden Site" is not similarly constrained. The SGC stated that the Community Solar Garden Site includes the point of common coupling, production meter, real estate interests, etc., and "Multiple Community Solar Garden Sites may be situated in close proximity to one another." Finally, SGC noted that there is no limitation on the number of Community Solar Garden Sites that may be situated in close proximity to each other under either the Xcel CSG Tariff or State law.[146]

The SGC claimed that Minnesota law does not preclude construction of multiple community solar garden sites in close proximity to each other. Although Minn. Stat. §216B.1641 defines a CSG to be a facility limited to one MW in generating capacity, SGC stated that the CSG statute could hardly be more clear that there be no limit to the cumulative generating capacity of CSGs. In addition, the SGC noted that the Commission required Xcel Energy to include a statement in its tariff explaining that "Multiple Community Solar Garden Sites may be situated in close proximity to one another in order to share in distribution infrastructure." According to the SGC, the Commission concluded that the clarification will allow solar gardens to be built more cost-effectively consistent with the statutory mandate that the program reasonably allow for the creation, financing, and accessibility of solar gardens. As such, the SGC claimed the Commission was simply following its duty to give effect to all of the provisions of a law.[147]

In its May 18 Comments, the SGC emphasized its willingness to engage in a thoughtful discussion to optimize growth of the CSG Program from all stakeholders' perspectives.

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[144] *Id.*, p. 1.

[145] *Id.*, p. 8.

[146] *Id.*, p. 5.

[147] *Id.*, pp. 5-6.

However, the SGC cautioned that the CSG Program needs to apply to existing applications as set forth in the existing statutes, Commission Orders and Xcel's Section 9 tariff - and as formerly agreed to by Xcel Energy. The SGC stated it understands the interests in looking for thoughtful, forward-looking changes to the program but it encourages the Commission to avoid upending prior Orders for fear that doing so could risk appeal or introduce significant new opportunities to call the whole program into question and create unworkable additional delays. In light of this concern, the SGC requested that any material programmatic changes made to address Xcel's April 28 Filing be made effective to new applicants no earlier than the date of the Commission's written order following its June 25th deliberation in this docket. Furthermore, the SGC asked the Commission to take action to ensure Xcel does not introduce any additional delays in the interconnection application process, lest the CSG Program fail over delays and missed opportunities for current project financing.[148]

According to the SGC, Xcel gave applicants instruction via direct conversations and on its website FAQ to notify Xcel in the application process if more than one garden are in close vicinity and request that they be studied together. The SGC claimed that all of this, in addition to very clear tariff language and Commission direction allowing for multiple solar garden sites in close proximity to one another, were additional factors incenting types of projects now in Xcel's queue and that Xcel now expresses concern over. The SGC also claimed that Members of the SGC and others reasonably relied on the clear direction on this issue, submitting applications as directed, while Xcel accepted over $50 million in deposits, began processing the applications, and deemed (to date) 313 applications "complete" under its interpretation of its program rules. According to SGC, SGC members alone have since spent millions of dollars in development costs in pursuit of these projects, including hundreds of thousands of dollars for timely interconnection engineering work by Xcel.[149]

The SGC stated that the only option being made available to members is to keep careful track of the damages incurred based on their reliance on the program as currently designed. While the SGC stated it is open to prospective adjustments to the program based on what has been learned since the program opening, retroactive changes to the program now (in particular, after so much has been invested and so close to an unworkable timeline to capture ITC benefits and thereby build projects) would result in severe consequences for SGC members and the solar industry at large in Minnesota. According to the SGC, it will not be lost on the industry and investors that fundamental program design rules were changed retroactively; thereby eliminating hundreds of MW of solar projects and forcing SGC members to evaluate their respective claims for damages.[150]

Despite its alarm at Xcel's proposed April 28 "solution" to its alleged concerns, the SGC stated it does not dismiss the overall concern Xcel must be facing with regard to the potential program size and impact on its business. The SGC stated that it appreciates that Xcel's CSG program has

[148] *Id.*, p. 10.

[149] *Id.*, pp. 5-6

[150] *Id.*, p. 7.

seen growth in its first few months of existence that is faster than some had predicted. The SGC also stated it understands that one of the most important concerns for the Commission is non-participating ratepayer impact and that both size and the potential for rate impact are valid concerns. However, the SGC asserted that addressing each concern requires a thoughtful response.[151]

The SGC suggested that rather than look backward and set negative precedent for any similar program in the future that the Commission look forward and apply tweaks to the program that are more likely to get at core concerns, based on what has been learned. The SGC stated it suggested this general course of action for two reasons: [152]

1) Any retroactive decision will have precedential value. The SGC stated its awareness of the regulatory transformation occurring in Minnesota, which includes expansion of decoupling programs, energy conservation incentive mechanisms, and ongoing discussion under the e21 Initiative of a significantly revised regulatory framework. According to the SGC, all of these discussions, as well as any new programs encouraged by the legislature, would be negatively impacted by knowledge that the Commission retroactively changed the rules to the detriment of third parties.

2) Xcel had multiple opportunities to ask the Commission to reconsider its decisions leading to this point, but failed to do so, rendering those decisions free from attack via an appeal. If the Commission chooses to clarify or otherwise modify its prior orders, including the September 17, 2014, order approving the CSG Program, the SGC cautioned that such a decision will effectively re-open the prior orders up to reconsideration, clarification and appeal - timelines that have otherwise tolled.

The SGC claimed that a retroactive limitation on co-location will not only unleash claims for damages by developers, but also questioned whether doing so would serve any purposes other than as an attempted program cap. The SGC stated that any limitation on co-location has to fit within the statutory framework and if the program remains unlimited, financeable and open to all customers, the net result could easily be no reduction in total megawatts but instead complicated reorganization of what is in the queue, more inefficient use of land, and at as high or higher costs to the ratepayer to support the change. With this in mind, the SGC stated it supported the Department's May 1 Motion to Show Cause which addressed, at least in part, the Department's concern regarding the potential for unintended consequences of any limitations on co-location.[153]

2. Public Comments

On May 1, 2015, Minneapolis City Council Member Cam Gordon filed a letter requesting that the Commission grant the Solar Garden Community's Petition for the reasons stated therein.

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[151] *Id.*, pp. 7-8.

[152] *Id.*, p. 8.

[153] *Id.*, p. 9.

Council Member Gordon stated that Xcel's stated course of action in its April 28, 2015 Supplemental Comments would set a negative precedent of a unilateral and retroactive change to significant program rules and that such a precedent would cause long-term harm to Minnesota energy policy, and to the people of Minneapolis. The Council Member added that Xcel's proposed actions appeared to him to be a clear violation of the CSG Program Approval Order, and will likely have the effect of stifling or even preventing the addition of significant new distributed renewable resources to the electricity grid - new resources that Minneapolis residents and businesses strongly support, and are keen to invest in.[154]

Juliet Branca and Mark Thoson, on behalf of a project called SHINE, (Solar Harvesting Is Now for Everyone) filed a May 18, 2018 letter asking the Commission to bring as much solar power online through this program as is feasible and as quickly as possible. Ms. Branca and Mr. Thosen describe the purpose of SHINE as to connect environmental philanthropists with charitable nonprofits to maximize their gifts while supporting clean energy and depends on the availability of subscriptions to Community Solar Gardens. As such Ms. Branca and Mr. Thosen expressed concerns with Xcel's unilateral action to limit participation by co-located gardens. They stated they believed that Xcel's notification to the PUC on 4/28/2015 indicating its intent to restrict all co-located Solar Gardens to a single megawatt is another attempt to control the energy market for its own profit. According to Ms. Branca and Mr. Thosen, limiting the program to only one MW stand-alone gardens, will limit the availability of subscriptions for large nonprofits making their initiative untenable.[155]

Likewise, Oak Grove Presbyterian Church (OGPC) filed a Letter on May 18 asking that the Commission Overrule Xcel's complaints about co-location and direct it to quit their stalling and to process all of the applications (500+) they have already received for CSGs, so they can get built in 2015 and so more can be built in 2016. OGPC represented itself as a potential subscriber to a CSG with a goal to cut its carbon emissions to net zero. OGPC suggested that as a public regulated monopoly Xcel has a duty to the "public good" and to future generations who are depending on us all for a world that is "livable."[156]

3. Metropolitan Council (Council)

The Metropolitan Council filed Comments on May 15, 2015 that stated it is important to note that the Council and its rate and taxpayers will potentially be damaged if Xcel does not timely process garden applications and move projects through the interconnection queue. The Council stated that if changes are allowed to the interpretation of the rules, it request projects in the queue be grand-parented and proceed under the original rule interpretation.

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[154] *Id.*, Letter in Support of Solar Garden Community's Petition for Expedited Relief filed by Minneapolis City Council Member Cam Gordon, May 1, 2015.

[155] *Id.*, See Comments filed by Juliet Branca and Mark Thosen, unaffiliated ratepayers, May 18, 2015.

[156] *Id.*, See Comments filed by Oak Grove Presbyterian Green Committee, May 18, 2015.

The Council acknowledged that this CSG program does potentially mean a small adverse impact to rates for Xcel customers (as compared to larger competitive solar procurements without prescribed credits) and so some limits may be warranted. However, The Council stated that CSGs are an effective tool to help the Council bypass limitations on installing its own solar facilities, while contributing to the promotion of renewable energy in Minnesota. In addition, the Council stated it has buffer land around its wastewater treatment plants well suited for CSGs. According to the Council, other marginal public land such as closed landfills, on brown fields, or around transportation corridors, are also an opportunity for a beneficial use of land that may otherwise not be used to its potential and it suggested consideration of a marginal public land exception to any eventual limitations.[157]

4. St. Paul Public Housing Agency

In a letter filed on March 10, 2015 St. Paul Public Housing Agency expressed surprise and disappointment in Xcel's Comments regarding Community Solar Gardens and Xcel's misguided interpretation of the legislation that has made renewable solar energy use in Minnesota a reality.

The PHA stated it supports the SGC's efforts to help the program proceed forward as it was originally contemplated and designed and to stop now would only hurt Minnesotans, whose legislature passed this law in 2013, providing for renewable solar energy. The PHA stated it went through a thorough process that began with issuing a request for proposals to solar garden developers in 2014 and the outcome was choosing a developer who provided a near shovel-ready community solar garden opportunity with renewable energy and significant savings to the PHA.

The PHA submitted that it is a worthy applicant as a subscriber for CSG seeking to promote safe, affordable housing for Saint Paul's residents and if it can promote its mission using renewable energy while also redirecting any energy savings to affordable housing, it should not be prevented from doing so in order to protect Xcel's interests. The PHA claimed it should not be summarily excluded from the program based on Xcel's wide sweeping claims that the CSG program was not meant for projects the size of the PHA project.[158]

5. Fresh Energy, Environmental Law and Policy Center, Institute for Local Self-Reliance, and Izaak Walton League of America (Joint Commenters)

On February 24, 2015 the Joint Commenters filed Comments that stated the Commission should disregard Xcel's narrow view of the CSG program's legislative intent and misleading cost analysis and instead should order the parties to work together to identify barriers and bottlenecks in Xcel's existing interconnection process. In addition, the Joint Commenters asked the Commission to re-affirm its September 17, 2014 Order as well as limit uncertainty by re-affirming the principle that any program changes will not be retroactive to filed CSG applications. The Joint Commenters had three basic points in response to Xcel's letter:[159]

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[157] *Id.*, See Public Comments, May 19, 2015.

[158] *Id.*, Comments from the St. Paul Public Housing Agency, March 10, 2015.

[159] *Id.*, Fresh Energy, Environmental Law & Policy Center, Institute for Local Self-Reliance, and Izaak

1) The Commission and all stakeholders involved in the development and launch of Xcel's CSG program should be proud of the significant interest and response it has generated. As Xcel reports in its letter, the Company has received in excess of 430 MW of applications for community solar projects to date and the magnitude of the response to Xcel's program indicates the excitement and demand for solar that will ultimately be good for jobs, good for economic development, and good for the environment.
2) Small customers and small gardens are not the only appropriate features of a well-designed CSG program. Larger customers such as St. Olaf College, Ecolab, and the St. Paul Public Housing Authority can serve as "anchor subscribers" to help provide certainty, credit, and stability to help secure overall project financing and expand access to other community participants.
3) The concerns stated in Xcel's February 10th letter regarding "operational concerns" and "rate pressure" are overstated and can largely be addressed by fixing Xcel's interconnection procedures and by making adjustments to the bill credit formula for future program participants.

The Joint Commenters recommended that the Commission should be clear that any future changes to this program will be made on a prospective basis only and will not be applied retroactively to existing applications and projects.[160]

Legislative Intent - In response to Xcel's Comment that raised concerns regarding customer classes participating in the CSG program and CSG project locations under the guise of legislative intent the Joint Commenters stated that when interpreting statutes, legislative intent is only looked to if the statute is ambiguous. The Joint Commenters assert that Xcel substitutes its narrow view of the CSG program for the plain statutory reading and neglects the broader benefits of market diversity in the CSG program. Although the Joint Commenters stated that they agree that expanding access for small customers is one important purpose of the community solar gardens law, it is not the only purpose. The Joint Commenters noted that the statute explicitly defines eligible subscribers as any "retail customer," and the statute clearly contemplates participation by large customers.[161] The Joint Commenters stated they expect that community "anchor" subscribers will enable CSG project creation that will provide opportunities for other customers; and contrary to Xcel's view, by enabling financing, accessibility, and the creation of solar gardens, large "anchor" customers are critical members of the community and their CSG participation is well within the spirit of the statute.[162]

CSG Project Size and Location – The Joint Commenters stated that the Commission has already considered and decided the issue of co-locating individual one MW CSG projects. In the Order

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Walton League of America Comments in response to the Commission's February 13, 2015 Notice of Comment Period, February 24, 2015, pp. 1-2.

[160] *Id.*, p. 2.

[161] *Id.*

[162] *Id.*, p. 3.

approving Xcel's Plan, the Commission stated "that the definition of 'community solar garden site' should expressly state that solar gardens may be sited near each other in order to share distribution infrastructure. This clarification will allow solar gardens to be built more cost-effectively and is consistent with the statutory mandate that the program reasonably allow for the creation, financing, and accessibility of solar gardens."[163]

According to the Joint Commenters, co-locating individual CSG projects is not circumventing statutory intent, because each one MW CSG has its own: (1) subscriber mix assigned to it; (2) CSG application; (3) interconnection application; (4) interconnection agreement; (5) engineering analysis, and (5) is electrically unique. According to the Joint Commenters, locating these projects next to each other achieves efficiencies for securing property and allows coordination for interconnection engineering. In addition, the Joint Commenters stated that if an application has more one MW projects than that site's distribution infrastructure can handle, the developer can decide whether to fund necessary upgrades and the costs are borne by developers and subscribers, with the upgraded distribution system benefiting all customers.[164]

Rate Analysis - The Joint Commenters asserted that Xcel's comments on the costs and rate pressure from the CSG program are speculative, misleading, and disingenuous because the Company uses assumptions to inflate the program's costs while ignoring benefits. In addition, the Joint Commenters suggested that there will be opportunities to adjust the CSG bill credit for future projects that will lead to even greater net benefits for Xcel's customers. [165]

The Joint Commenters also stated that Xcel's preliminary analysis assumes that all of the initial 431MWs applied for will come online and that assumption is unrealistic considering that, to be successful, each of the applied for projects will need 1) financing, 2) enough customer load in adjacent counties to off-take bill credits, 3) interconnection with affordable upgrades, 4) capital for fees, and 5) sufficient customers agreeing to subscribe. The Joint Commenters claimed it is very unlikely that all 431 MWs of applications will be able to put all of these pieces together.[166]

The Joint Commenters stated also that Xcel's analysis focuses only on costs and roundly ignores any benefits from proposed CSG projects other than energy valued at avoided-cost. The Joint Commenters noted that in its model, Xcel assumes that the lone value from a CSG project's output is the "avoided energy cost," and this refers to the value of generic electrons on the wholesale market. However, the Joint Commenters claimed that the solar electricity from CSG projects are not generic electrons and shouldn't be valued as such. The Joint Commenters noted that the CSG projects will provide electricity produced at or near load, from a source that is emissions free, and that provides Xcel with MISO accredited capacity, helps Xcel achieve state renewable, solar, and green-house-gas requirements, and has zero fuel-price volatility risk. According to the Joint Commenters, the Legislature recognized that distributed solar should be

[163] *Id.*

[164] *Id.*, p. 3-4.

[165] *Id.*, p. 4.

[166] *Id.*

analyzed by looking at both costs and benefits when it enacted the option for a Value of Solar (VOS) tariff, and the approved Methodology quantifies these values noted above, among others. The Joint Commenters noted also that the VOS rate is also what the statute sets out as the CSG bill credit rate if a utility opts to file a VOS tariff, and therefore, a VOS estimate is a much more analytically sound value to analyze the net system cost or benefit from the program. In light of Xcel's faulty assumptions that ignore the CSG program's benefits, the Commission need not take immediate action based on Xcel's rate analysis.[167]

In its March 4 Reply Comments, the Joint Commenters requested that the Commission not adopt the Department's recommendation for a 10 MW cut-off for co-located CSGs. In response to the Department recommendation that the Commission "[d]etermine that co-located solar gardens that collectively exceed 10 MW of nameplate capacity are outside the scope of Xcel's distribution system interconnection requirements," the Joint Commenters recommended that the Commission not adopt the Department's suggestion as proposed for two reasons:[168]

1) Other commenters have outlined in great detail that co-located projects that collectively exceed 10 MW are not incompatible with section 10. The Joint Commenters disagreed with the Department's assertion that "if the combined co-located gardens total over 10 MWs in capacity, it does not appear that Xcel's section 10 tariff interconnection process can process the interconnection request."
2) The Department's recommendation appears to apply to CSG applications that have already been filed as well as applications that have already been deemed complete. The Joint Commenters asserted that the Commission should not make significant programmatic changes, such as the Department's suggestion, retroactively.

The Joint Commenters stated that they continue to recommend that the existing rates and program rules continue to apply to all CSG projects that have applications on file as of the date of any final commission order modifying the CSG program.[169]

In their April 2, 2015 Comments the Joint Commenter suggested that:[170]

- Xcel's proposal to completely disallow co-located one MW CSG projects should be rejected; and
- The Implementation Workgroup is not a proper venue to make major policy decisions without changes to ensure independent facilitation and decision-making.

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[167] *Id.,* pp. 4-5.

[168] *Id.,* Fresh Energy, Environmental Law & Policy Center, and Institute for Local Self-Reliance Reply Comments in response to the Commission's February 13, 2015 Notice Seeking Comments, March 4, 2015, pp. 1-2.

[169] *Id.,* p. 2.

[170] *Id.,* Fresh Energy, Environmental Law & Policy Center, and Institute for Local Self-Reliance, and Izaak Walton League of America Comments in response to the Commission's March 13, 2015 Notice of Comment Period, April 2, 2015, p. 1.

The Joint Commenters stated that Xcel's proposal to completely disallow co-located one MW CSG projects should be rejected. The Joint Commenters reiterated that any adjustments should not be retroactive to already filed CSG applications. According to the Joint Commenters, any changes that apply to existing projects would not only threaten to derail these projects and investments, but would endanger future investment in the State of Minnesota if it perceived as not providing regulatory certainty. The Joint Commenter stated that Xcel's proposal ignores that all CSG applications must be individual one MW projects to be approved and instead attempts to brand co-located projects as "utility-scale" based on its own, narrow interpretation. [171]

The Joint Commenters suggested that the bill credit formula for larger co-located projects could potentially be modified to reflect economies of scale associated with those projects. However, any future adjustments to co-location rules or bill credit formulas should be set through an open transparent process led by the Commission, not through unilateral interpretations of the intent of the statute reached by Xcel or any other party.[172]

The Joint Commenters stated that while they appreciated Xcel's willingness to work with developers and certain stakeholders to discuss routine issues and questions that arise in Xcel's implementation of the CSG program, the Workgroup as currently constituted is unlikely to be a successful forum for resolving larger policy issues or program adjustments because not all stakeholders are represented in the Workgroup, the Workgroup is convened and facilitated by Xcel and Xcel is also the ultimate Workgroup arbiter. According to the Joint Commenters, this structure is not well suited for reaching consensus or making decisions on important program design issues on which Xcel is certainly not a neutral partner, and therefore the workgroup is unlikely to be a fair or effective decision-making venue on major issues without a neutral facilitator and/or decision-maker.[173]

In their April 30, 2015 Reply Comments and in response to Xcel's April 28, 2015 Notice of Program Administration, the Joint Commenters stated that the Commission should reject Xcel's attempt to retroactively change the rules that apply to existing applications and make clear that future program changes will apply on a prospective basis only.[174]

The Joint Commenters stated that Xcel's filing is causing market uncertainty just as the CSG program gets off the ground, and further delay in resolving this issue could push projects past the program's 24 month construction requirement and the post-2016 expiration and step-down of the Federal Investment Tax Credit that is built into current project economics and financing. According to the Joint Commenters, Xcel's April 28 Notice seeks to revisit settled issues and

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[171] *Id.,* pp. 1-2.

[172] *Id.,* p. 2.

[173] *Id.*

[174] *Id.,* Fresh Energy, Environmental Law & Policy Center, and Institute for Local Self-Reliance Reply Comments in response to the Commission's March 13, 2015 Notice Seeking Comments, April 30, 2015, p. 1.

departs from Xcel's prior position on co-location of CSGs. The Joint Commenters suggested that the Commission should act promptly to reject Xcel's extraordinary request to unilaterally change program rules for existing applications and to prevent any further delays in Xcel's processing of current applications, the Commission should grant the relief requested in the Solar Garden Community Petition filed April 29, 2015.[175]

The Joint Commenters stated again that they are not suggesting that CSG program has no room for improvement as it evolves and matures, including regarding some of the concerns Xcel raises and, to this end, they stated they have offered different forward-looking program changes for bill credit designs and are expecting to work with Xcel, other stakeholders, and the Commission on other features of the program design for future projects. However, the Joint Commenters emphasized that Xcel's proposal to significantly change the rules of the game for existing applications penalizes parties that have been operating under settled rules in Commission orders and undermines confidence in the Minnesota process.[176]

In their May 18, 2015 Comments the Joint Commenters recommended the following:[177]

1) If the Commission wishes to limit the size of cumulative co-located projects in the program, the Commission find that Section 10 Tariff's 10MW limit applies to co-located CSG applications as they interconnect through the Section 10 tariff and the co-location limit apply for only for CSG applications deemed complete 60 days after the Commission's updated Order.
2) The Commission evaluate an interconnection target for Xcel to reach by December 31, 2015, based on Department of Commerce analysis of the current interconnection status of applications and how many could reasonably complete Step 10 of the Section 10 tariff process for interconnection. In addition, require more frequent and thorough interconnection reporting to enable the Commission and stakeholders to track Xcel's progress meeting Section 10 timing requirements as detailed in the Joint Commenters previous Comments,
3) Modify the subscriber bill credit rates for CSG applications deemed complete after 60 days of the Commission's Order as follows:

    a) For applications solar gardens cumulatively less than or equal to 1 MW at a given site: maintain the current Applicable Retail Rate (ARR) and REC prices as defined in the Commission's September 17, 2014 Order.
    b) For new solar gardens cumulatively over 1 MW at a given site: set the bill credit at Xcel's calculated Value of Solar (VOS) rate, with the following financing adders:

[175] *Id.*, pp. 1-2.

[176] *Id.*, p. 2.

[177] *Id.*, Fresh Energy, Environmental Law & Policy Center, and Institute for Local Self-Reliance Reply Comments in response to the Commission's March 13, 2015 Notice Seeking Comments, April 30, 2015, p. 8.

i. $0.02829 per kWh residential customer financing adder, and
ii. $0.02517 per kWh small general service customer financing adder.

The Joint Commenters reiterated that with a diminishing amount of time before the federal Investment Tax Credit (ITC) step-down at the end of 2016, it is important for the Commission to clearly set the CSG program rules and limit uncertainty as much as possible. Accordingly, the Joint Commenters stated that transparent program rules are especially important for projects that have been in development for months, have complete or near complete applications and are facing the 24 month completion deadline under Xcel Energy's (Xcel or the Company) Section 9 tariff. The Joint Commenters stated many of the "significant policy issues" raised by Xcel in its February 10, 2015 Comments and April 28, 2015 Supplemental Comments that spurred the Company's decision to abruptly change the CSG program administration are overblown and do not require the extraordinary measures Xcel has proposed.[178]

The Joint Commenters stated that their recommendations apply to new applications and not retroactively to projects already in the approval process. The Joint Commenters again asserted that retroactive changes based on unilateral action by Xcel would send the signal that Minnesota is not a stable regulatory environment.[179] The Joint Commenter asserted that Xcel's Rationale for retroactive program changes is flawed for the following reasons:[180]

First, The Joint Commenters claimed that out of the large number of applications filed in the program to date it is still very uncertain as to how many will result in actual constructed projects.[181] Moreover, the Joint Commenters suggested that, because there is no public interconnection queue, there is a real possibility that multiple developers have filed applications at the same interconnection point. The Joint Commenters noted that there is information in the record suggesting that there are multiple projects in various interconnection queues within the initial cohort of applications.[182]

Finally, the Joint Commenters strongly disagreed with Xcel's overstated and unsupported cost projections in the Company's rate impact analysis, because (1) Xcel's rate impact analysis assumes that 100% of applications will be constructed, which is an unrealistic assumption for the reasons above; (2) Xcel's analysis ignores the benefits of distributed clean energy, assigning an avoided-cost value to CSG projects' energy – the same rate for which fossil fuel projects are also eligible; and (3) comparisons to existing rates will not capture the economic development benefits to the State from the program or the benefits from the distribution system upgrades

[178] *Id.,* p. 1.

[179] *Id.,* pp. 2-3.

[180] *Id.,* pp. 3-4.

[181] *Id.,* p. 3.

[182] *Id.,* pp. 3-4.

expected as a result of community solar projects, which will be funded by developers, yet will benefit the whole utility system and all utility ratepayers.[183]

The Joint Commenters stated that although a few, large co-located projects have grabbed media attention; the majority of co-located projects are well within what would commonly be considered "distributed generation." Nevertheless, the Joint Commenters stated that they agree that differences in economies of scale mean that, for the foreseeable future of the program, large co-located community solar projects should not be eligible for the same rates as smaller gardens Therefore, the Joint Commenters stated they understood that the Commission may seek to limit the size of co-located gardens that are eligible for tariffed rates moving forward. If the Commission adopts a co-location limit, the Joint Commenters stated it should not allow Xcel to use the "totality of the circumstance" approach it proposed in its response to the OAG's information request number 121. According to the Joint Commenters such an approach would allow Xcel almost universal discretion to determine if a set of projects should qualify as co-located and a lack of parameters guiding a definition of co-location will inevitably lead to arbitrary determinations and disputes.[184]

6. Minnesota Center for Environmental Advocacy, Izaak Walton League of America, and Sierra Club (Clean Energy Organizations)

On May 1, 2015, the Minnesota Center for Environmental Advocacy (MCEA) and the Sierra Club, two thirds of the Clean Energy Organization, filed Comments that requested the Commission issue an immediate order directing Xcel to consider all applications, including those co-located with other community solar gardens resulting in an aggregate capacity of more than one MW, consistent with the Commission's September 17, 2014 Order. MCEA and the Sierra Club opposed Xcel's Notice to Administer Program, which indicated its intention to cut the applications for its Community Solar Garden program from 560 MW to about 80 MW—an 85% reduction. MCEA and the Sierra Club claimed that an 85% reduction in the MWs of solar waiting to be developed would severely limit the cumulative generating capacity in contravention of this statutory language.[185] MCEA and Sierra Club stated it opposed this action because it is an attempt to constrain an uncapped program and because it would set an unworkable precedent by allowing a regulated entity to seek out-of-time reconsideration of a Commission decision simply by declaring its intention to violate the decision. For these reasons, MCEA and Sierra Club stated it supported the SGC's Petition for Expedited Relief. [186]

In its May 18, 2015 Comments, the Clean Energy Organizations (CEO) requested that the Commission order Xcel to continue to process applications it has received to date under the program as currently designed and ordered by the Commission—including allowing community

[183] *Id.,* p. 4.

[184] *Id.,* pp. 5-6.

[185] *Id.,* Minnesota Center for Environmental Advocacy and Sierra Club Comments in support of the Petition for Expedited Relief filed by the Solar Garden Community, May 1, 2015.

[186] *Id.*

solar gardens to be co-located. The CEO requested further that if Xcel refuses to comply with the Commission's past orders, it agreed with the relief requested by the Solar Garden Community in its April 29, 2015 Petition for Expedited Relief including all appropriate enforcement action. Finally CEO stated that if adjustments to the program need to be made on a prospective basis, the Commission can adjust the program accordingly. CEO stated it reached this position for the following reasons:[187]

1) Xcel's maneuver is essentially an untimely request for reconsideration of the Commission's September 17, 2014 Order and must be rejected.
2) A retroactive change to the program of this magnitude would create unnecessary instability and erode public confidence in Commission proceedings.
3) Xcel's stated reasons for violating the Commission's previous Order are unsubstantiated and not supported by Minnesota law.

According to CEO, Xcel's filing is an untimely petition for reconsideration and should be rejected. CEO explained that, as with any order of the Commission, "[a] party or a person aggrieved and directly affected by a commission decision or order may file a petition for rehearing, amendment, vacation, reconsideration, or reargument within 20 days of the date the decision or order is served by the executive secretary." According to CEO, the purpose of this deadline to seek rehearing is to ensure finality of Commission decisions. CEO noted that in its September 17, 2014 Order, the Commission expressly considered co-location of community-solar-garden projects and determined that "[m]ultiple Community Solar Garden Sites may be situated in close proximity to one another in order to share in distribution infrastructure." Because Xcel did not petition for reconsideration of the Commission's decision, this Order became final after the 20-day reconsideration period, and Xcel missed its opportunity to challenge the decision in that Order that community-solar-garden sites can be located "in close proximity" to one another.[188]

CEO also recommended that the Commission should not allow retroactive changes to the CSG program at this stage in the proceedings and applications already received by Xcel under its current community-solar-garden tariff, which allows community solar gardens to be co-located with one another, should be processed accordingly. CEO claimed that the integrity of the Commission's procedures for allowing interested parties to participate in these dockets of general interest would be seriously undermined if the Commission allowed Xcel to unilaterally and retroactively redesign the program outside of the proper procedural channels. Moreover, CEO stated the developers of community solar gardens have made substantial investments relying on the Commission's Order, and Xcel's intention to refund developers for program application, deposits, and interconnection fees will not make those developers whole for the losses they will suffer.[189]

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[187] *Id.,* Minnesota Center for Environmental Advocacy, Izaak Walton League of America and Sierra Club Comments in response to the Commissions May 1, 2015 Notice of Comment Period. , May 1, 2015, p. 1.

[188] *Id.,* p. 2.

[189] *Id.,* pp. 2-3.

CEO acknowledged that with any new program there are bound to be adjustments that need to be made as the implementation of the program sheds light on potential issues and it was not suggesting that the CSG program is perfectly designed or that the Commission should ignore the many comments and suggestions filed by interested parties in this docket to date. If the design of the CSG program needs to be adjusted going forward, CEO stated the Commission can make changes at its June agenda meeting based on the record and comments of the parties. However, CEO strongly urged the Commission not to allow Xcel to violate the September 17 Order by throwing out 85% of the applications properly received under the current program.[190]

Finally, CEO claimed that Xcel has not established that co-located gardens are contrary to statutory intent or will negatively impact ratepayers. According to CEO, statutes are to be interpreted as written based on their plain meaning. While the statute limits an individual solar garden to a "nameplate capacity of no more than one megawatt," CEO stated there is nothing in the statute that suggests co-locating multiple gardens should be prohibited. CEO noted that the statute specifically states that "[t]here shall be no limitation on the number or cumulative generating capacity of community solar garden facilities other than the limitations imposed under section 216B.164, subdivision 4c, or other limitations provided in law or regulations."[191]

CEO stated it appears that Xcel's actual argument is that it did not anticipate the level of interest in the program demonstrated by the solar development community or by the commercial and industrial customers looking for a way to offset their carbon footprints and Xcel's attempt to tie its concern over the unexpected level of interest in the CSG program to the Commission's decision to allow gardens to be co-located is not grounded in fact.[192]

In addition, CEO stated that Xcel's concern that allowing immediate interconnection of 560 MWs of solar would have a negative impact on ratepayers as well as legal and technical consequences is not grounded in the information available at this time because it is not known at this point whether it will be feasible to interconnect all 560 MWs for which applications currently exist.[193]

7. Interstate Renewable Energy Council (IREC)

In its February 24, 2015 Comments, IREC stated it believed that the "operational considerations" raised by Xcel do not implicate the need to modify the CSG program but rather to reform Minnesota's interconnection procedures to comport with best practices. In the near term, however, IREC suggested that the Commission clarify that CSGs should remain within the current Section 10 review process, and that Xcel must coordinate with the Midcontinent Independent System Operator (MISO) to conduct any necessary review of transmission-level

[190] *Id.*

[191] *Id.*, pp. 3-4

[192] *Id.*

[193] *Id.*, p. 4.

impacts that arise, as indicated by MISO's policies regarding distribution-level interconnections. Going forward, IREC urged the Commission to undertake a separate, more comprehensive reevaluation of the State's interconnection procedures.[194]

8. Minnesota Community Solar (MNCS)

In its February 24, 2015 Comments, MNCS noted that Xcel expressed a concern that the preponderance of large CSG projects signifies a focus on large customers to the exclusion of residential and small business customers, that this defeats legislative intent, and that large developers are gaming the CSG system by proposing large projects artificially subdivided to meet CSG size requirements to circumvent the traditional route to a PPA for larger projects. MNCS stated that although Xcel's concerns may have some merit, it is not clear that the Commission needs to take any action on the matter.[195]

MNCS claimed that, although it may be that proponents of the CSG statute contemplated it as a mechanism for residential and small business customers to more effectively participate in solar projects, it does not follow that this vision was meant to exclude larger customers from participation or limit their participation. MNCS noted there is no language in the applicable statute even suggesting such a limitation.[196] As a practical matter, MNCS stated it does not see the presence of large projects focused on industrial customers as having a detrimental effect on opportunities for residential and small commercial customers. As developers of small projects improve their subscriber management processes and the CSG program becomes better established, MNCS stated it expects that sufficient capacity will be available to meet subscriber demand for such classes.[197]

MNCS stated also that it seems premature to assume that all 431 MW will be completed, fully subscribed and operational. On the contrary, MNCS stated it seems highly likely that many such projects will not reach full development for a number of reasons, may not be subscribed due to lack of overall demand or more competitive projects, may suffer interconnection constraints, or may experience delays which cause loss of financing or tax credits. According to MNCS, a better time to review this issue might be closer to the end of 2015 after the application process has progressed and projects will need to have attracted actual subscribers to be financed and move forward in 2016. Even then, MNCS contends it is not for the Commission to adopt limits on the CSG program inconsistent with the statute. If Xcel believes legislative intent and the public interest intended by the CSG statute is not being met, MNCS stated that the solution lies with the legislature, not by asking the Commission to nullify the statute as written. [198]

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[194] *Id.*, Interstate Renewable Energy Council, Inc. Comments in response to the Commission February 13, 2015 Notice seeking Comments, February 24, 2015, p. 3.

[195] *Id.*, Minnesota Community Solar, LLC. Comments in response to the Commission's February 13 Notice Seeking Comment, February 24, 2015, p. 3.

[196] *Id*

[197] *Id.*

[198] *Id.*, pp. 4-5.

In its April 2, 2015 Comments, MNCS stated that all requested changes in the CSG program are unnecessary. MNCS suggested that, as evidenced by Xcel's status reports to the Commissions, the Commission's approved CSG Program has been successful in attracting a substantial number of market participants and proposed projects and this is the first step in assessing whether the program's objectives are being met. MNCS stated that assuming projects are approved, the key to attracting subscribers and financiers for a long-term commitment to a CSG is to be able to offer them certainty and stability in how the project and CSG program will work. Without this, MNCS claimed project development and financing will grind to a halt and the successful launch of the CSG program will run aground. MNCS stated also that it is particularly important to stop program reconfiguration promptly so projects can be finalized and built before expiration of the investment tax credit at the end of 2016.[199]

In its April 30 Reply Comments, MNCS stated it agreed with the parties who point out that no person is entitled to decide unilaterally that the law does not apply to them. MNCS agreed with the Department that current Commission orders and Xcel's tariffs clearly permit co-location and Xcel is not entitled to disregard these clear obligations. According to MNCS, these actions call into question whether the Commission or any party can continue to rely on Xcel to implement the CSG program in good faith and the Commission needs to immediately make clear to Xcel that Xcel cannot take action in violation of the existing law, and the Commission should not feel pressured to change such laws solely due to Xcel's defiance.[200]

9. Minnesota Solar Energy Industry Association (MnSEIA)

In its February 24, 2015 Comments MnSEIA stated that some developers may be planning to create multiple one MW gardens that are close to each other and they are taking advantage of the cost savings alluded to in the September 17th order. By building gardens in near proximity, MnSEIA stated that developers will save ratepayers money while installing large amounts of clean energy.[201]

MnSEIA stated also that because a corporation is taking up a large percentage of a garden, it does not mean that residential customers are being excluded. According to MnSEIA, it is more likely that the residential customer is interested in using their employer as their vehicle for green energy subscription. MnSEIA claimed that providing corporate accessibility to gardens allows some companies to develop more cost-effective subscription programs for its employees. MnSEIA claimed further that if the current CSG plan is left intact, then Xcel's interpretation of the Legislature's intent will be fulfilled.[202]

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[199] *Id.,* Minnesota Community Solar, LLC. Comments in response to the Commission's March 13, 2015 Notice of Comment Period, p. 2.

[200] *Id.,* Minnesota Community Solar, LLC. Reply Comments in response to the Commission's March 13 Notice Seeking Comment, April 30, 2015, p. 3.

[201] *Id.,* Minnesota Solar Energy Industry Association Comments in response to the Commission's February 13, 2015 Notice Seeking Comment, February 24, 2015, p. 2.

[202] *Id.,* p. 3.

In response to Xcel's concern for the rate impacts on non-participants, MnSEIA stated that Xcel is bolstering the numbers to make them scarier. MnSEIA stated it would be surprised if the 431 projects all go forward and that many more projects have been applied for than will be constructed. MnSEIA stated further that it does believe the Legislature foresaw some degree of rate impact and that they foresaw a holistically positive ratepayer experience. MnSEIA noted that the VOS statute suggests that energy would be purchased at variable prices, including at the Value of Solar VOS rate and if the Legislature adopted the VOS, it is because it is a way for the utility, society and ratepayers to capture the true value of solar. In theory, the utility would purchase energy at a higher rate, because the VOS would ensure that ratepayers see benefits, such as an improved environment and more stable fuel prices, encapsulated in the cost. Therefore, according to MnSEIA, the Legislature sought a positive, holistic ratepayer impact, and they likely foresaw higher early CSG rates prior to the benefits accruing.[203]

MnSEIA also claimed that CSGs are not utility-scale solar development, because they are capped at one MW installations and Xcel can purchase cheaper energy at a utility-scale project than they can from a solar garden. For an analogy, MnSEIA used purchasing fruit from a co-op or a Costco. MnSEIA stated you can get apples cheaper at Costco than from a local co-op and Co-ops will have more expensive products, because their customers are buying more environmentally and community beneficial products. According to MnSEIA, very similar reasoning applies to the difference between purchasing energy from CSGs or utility-scale developments.[204]

On April 2, 2015 MnSEIA filed Comments in response to the City of Monticello's concern that fifty one MW gardens would be placed in their future economic development area. MnSEIA stated that it had learned from Sunrise Energy Ventures ("Sunrise"), the developer of the Monticello project, that the city and Sunrise have undergone substantial negotiations, and are optimistic that an agreement can be reached.[205]

In its May 18, 2015 Comments MnSEIA filed Comments that stated its members agree that Xcel should be required to follow the Commission's Orders, but they diverge on some of the issues that will be coming before the Commission on June 25th.[206]

10. Sunrise Energy Ventures (Sunrise)

On March 4, 2015, Sunrise filed Reply Comments in response to a comment filed in this docket by the City of Monticello on March 3, 2014. Sunrise stated it is committed to continue to work

[203] *Id.*, p. 5.

[204] *Id.*, p. 6.

[205] *Id.*, Minnesota Solar Energy Industry Association Comments in response to the Commission's March 13, 2015 Notice of Comment Period, April 2, 2015, pp. 3-4.

[206] *Id.*, Minnesota Solar Energy Industry Association Comments in response to the Commission's May 1, 2015 Notice of Comment Period, May 18, 2015.

with the city and other entities to help resolve any concerns that they may have regarding CSGs and that it greatly appreciates the local planning being done by the City and understands that the success of its projects is highly dependent on the local community acceptance of the same. According to Sunrise, it is wholly unclear if this docket or any docket at the Commission is really the appropriate venue to address the concerns raised by the City. Sunrise stated that while it appreciates the City's concerns about rural land use and sprawl, it is not clear what role or power the Commission has in "accommodating municipal growth factors" or characterizing certain land uses. Sunrise stated it recognizes that the Commission does play an important role in siting certain energy projects and that the City has raised related permitting concerns, but it does not believe that this is the right docket or time to address such concerns. Sunrise stated that no determinations have yet been made about the number of CSGs to move forward, how to proceed with permitting, nor has anyone sought any determination on the appropriate "size" of the project for permitting purposes. Regardless of how this project proceeds forward, Sunrise stated it will necessarily work with the City throughout the process.[207]

11. SunShare, LLC

In its February 24 Comments SunShare LLC (SunShare) suggested that in the absence of additional relevant information from Xcel Energy or other Community Solar stakeholders, it believed that, in addition to actions resolving interconnection issues, the Commission should take the follow actions to restore market certainty, guide Xcel's actions, and support a robust competitive Community Solar market in service of the state's 10 percent solar goal and other relevant policy goals:[208]

- Resolve market uncertainty by clarifying that Xcel can and should continue to process CSG applications in a timely manner;
- Reaffirm the Commission's September 17, 2014 Order regarding CSG site definition, and Deny Xcel permission to take any unilateral action to delay or disqualify co-located CSG interconnection requests; and
- Establish, if the Commission deems necessary, an appropriate timeframe, process, and methodology for estimating the CSG program's rate impact, if any.

SunShare stated it believed that these issues are procedurally ripe for consideration, and it urged prompt Commission action to ensure the success of the CSG program and support the many small businesses like SunShare seeking to build CSGs in 2015 based on the Commission's September 17, 2014 Order. Going forward, SunShare stated it also believed there may be a need to develop a structural solution (*e.g.*, incentives and penalties) to encourage and allow for rapid interconnection of distributed solar.[209]

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[207] *Id.*,Sunrise Energy Ventures Reply Comments in response to the Commission February 13 Notice Seeking Comments, March 4, 2015.

[208] *Id.*, SunShare, LLC Comments in response to the Commission's February 13, 2015 Notice Seeking Comment, February 24, 2015, pp. 1-2.

[209] *Id.*, p. 2.

SunShare stated that Xcel's February 10 Comments were surprising, in that Xcel never raised its alleged concerns regarding the co-location rule with developers in the CSG implementation workgroup. Procedural issues aside, SunShare stated it does not believe that Xcel has articulated a justifiable reason to restrict co-located projects sized above a particular one-size-fits-all numerical limit. According to SunShare, co-location has clearly been allowed up to this point, and the practice is already constrained by distribution and engineering considerations, along with subscriber-proximity requirements (in statute) and non-program factors related to land contracts and local-government zoning ordinances. Therefore, SunShare stated it rejects Xcel's proposed interpretation of Section 10.[210]

SunShare stated further that Xcel's February 10 filing has caused market uncertainty regarding the status of relatively larger groups of CSG projects, and CSG projects more generally. Alternatively, SunShare suggested that the Commission could articulate a near-term grandfathering principal (sheltering collocated CSG applications submitted to date), combined with a longer-term timeline or set of conditions under which it would re-examine the site definition based on accumulated utility experience and market data. From a policy perspective, SunShare suggested also that the Commission may want to consider more-finely grained, cost- or market-based mechanisms for influencing the extent of co-located CSG projects.[211]

SunShare stated that Minn. Stat. §216B.1641 was obviously intended to help Minnesota to meet its ambitious 2020 and 2030 solar goals and beyond. SunShare asserted that Xcel's overly-restrictive characterization of the legislative intent, including the implication that subscriptions should be restricted to certain customer classes, is contrary to both the statute and the record. [212]

As with the co-location rule, SunShare stated that Xcel did not raise concerns regarding alleged fuel-cost-adjustment impact with developers at the CSG Implementation Workgroup, including that the entire CSG fleet will be 100% subscribed all of the time and 100% of developers' CSG project applications to date will accomplish final commissioning within 24 months. In addition, SunShare claimed that the proposed methodology also appears to be inconsistent and in conflict with the Commission's 2014 "VOST" Order establishing a rigorous methodology for valuation of solar resources that connect to Xcel's distribution system. [213]

In its March 4 Reply Comments SunShare stated that a 10-MW cap would not address Xcel's alleged concerns with transmission impacts, because transmission back-feed can occur with systems much smaller than 10 MW (and transmission back-feed itself is not problematic, as long as the interconnection is engineered to avoid triggering NERC reliability concerns.) By the same token, SunShare assured that some substations can easily accommodate more than 10 MW of

[210] *Id.,* p. 7.

[211] *Id.,* p. 8.

[212] *Id.,* pp. 8-9.

[213] *Id.,* p. 9.

distributed solar (from an engineering perspective). Therefore SunShare stated that a one-size-fits-all limit on CSG co-location would result in economic waste.[214]

Also, SunShare stated a 10-MW cap on co-location would not address Xcel's alleged concerns regarding impact on fuel-cost payers, because developers can (and probably should) distribute their projects more widely, but there's no evidence in the record that doing so would lead to less CSG generation or subscriber demand.[215]

In its April 30, 2015 Comments, SunShare agreed with the Joint Commenters' assertion that "the bill credit formula for larger co-located projects could potentially be modified to reflect economies of scale associated with those projects." As such, SunShare disagreed with the Department to the extent that its April 2, 2015 Comments could be read to imply that a pricing mechanism designed to reflect site-specific economies of scale would be unworkable. SunShare noted that the current bill credit rate structure already includes a project-size-based break point (at 250 kilowatts), and there has been no assertion in this docket that this break point has been problematic or unworkable.[216]

12. The Minnesota Department of Commerce, Division of Energy Resources (Department or DOC)

On February 24, 2015 the DOC filed Comment that recommended the Commission:[217]

- require Xcel to provide a breakdown by customer class of community solar garden subscribers in reply, and to update the breakdown on a quarterly basis
- determine that co-located solar gardens that collectively exceed 10 MW of nameplate capacity are outside the scope of Xcel's distribution system interconnection requirements

The Department stated it had concerns with some of the assumptions Xcel made in its rate impact analysis. Specifically, as described by the Department, the Company compared the bill credit rate for CSGs to the avoided cost rate available to qualifying facilities (QFs) of 100 kW or less, and to QF's with capacity greater than 100 kW only if firm power is provided. In addition, the Department noted that most of the proposed solar projects are much larger than 100 kW. Further, to qualify as providing firm power, these facilities would need to have on-peak capacity factors of at least 65 percent; a capacity factor that a one MW solar facility may not achieve.[218]

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[214] *Id.,* SunShare, LLC Reply Comments in response to the Commission's February 13, 2015 Notice Seeking Comment, March 4, 2015, pp. 1-2.

[215] *Id.,* p. 2.

[216] *Id.,* SunShare, LLC Reply Comments in response to the Commission's February 13, 2015 Notice Seeking Comment, March 4, 2015, pp. 6.

[217] *Id.,* DOC comments in response to the Commission's February 13, 2015 Notice Seeking Comment, February 24, 2015, p. 4.

[218] *Id.,* p.1.

Consequently, the Department stated that the appropriate comparison based on information available at this time is between a solar garden average bill credit of $120 per MWh and the $73 per MWh levelized cost that Xcel disclosed for the three utility-scale solar bids in the recent Solar Acquisition Docket (Docket No. E-002/M-14-162). Using this figure would reduce the rate impact from Xcel's 1.5 to 1.8 percent to 0.92 to 1.17 percent, according to the Department. In addition, the Department noted that Xcel assumed a 19 percent capacity factor for the solar projects, but in Xcel's July 11, 2014 report on its solar energy standard (Docket No. E999/M-14-321), Xcel assumed a 17 percent capacity factor. Thus, the Department concluded that the 17 percent capacity factor should be used until updated production data or accreditation from the Midcontinent Independent System Operator is available and correction of this factor reduces the bill impact further, to 0.83 to 1.05 percent. Finally, the DOC agreed with parties that given the interconnection issues discussed in the Commission's February 13, 2015 Order in this docket, the likelihood that all proposed projects will make it through the interconnection process may be small. Although the Department's analysis suggests a smaller rate impact, the DOC acknowledged Xcel's concerns with the potential for solar garden participants to increase costs for non-subscribers.[219]

In regard to a disproportionate level of participation by large commercial customers noted by Xcel the DOC stated that while changing the bill credit rate for large commercial customers currently subscribed to a CSG is not possible as it would constitute retroactive ratemaking, considering changes on a going-forward basis may be reasonable. The DOC suggested that one way to reduce the rate impact may be to use the Value of Solar rate as a transparent methodology intended to reflect the combined value to the utility, its customers and society of solar facilities and the Commission may wish to consider whether Value of Solar rates or other rate methodologies are a more reasonable means of compensating large commercial customers' participation in the SRC program on a going-forward basis.[220]

The Department acknowledged that the CSG program is new, with many unknowns about participation barriers and incentives. The DOC recommended that Xcel be required to provide a breakdown of existing SRC subscribers by customer class in reply comments in order to better gauge the mix of customers participating in the SRC program, and to provide an update of this breakdown for existing and new applications on a quarterly basis. The DOC suggested that such a breakdown could assist the Commission to understand better the mix of participating customers, and the significance large commercial customers play in the customer mix.[221]

The DOC stated that while the CSG statute states that a solar garden must have a nameplate capacity of no more than one megawatt; the statute is silent on locating multiple solar gardens in close proximity to each other.[222] The Department considered the Commission's recent February

[219] *Id.,* pp. 1-2

[220] *Id.,* p. 2.

[221] *Id.*

[222] *Id.* p.3.

13, 2015 Order on the community solar interconnection application process to be helpful in evaluating the issue of siting multiple gardens in close proximity to each other. As noted in the Order, Xcel's Section 9 Cogeneration tariff governs the Solar*Rewards Community program, and Xcel's Section 10 tariff governs the interconnection process for distributed resources with a nameplate rating of 10 MW or less interconnecting to the Company's distribution system. In reviewing the engineering processing of community solar garden applications submitted under the Section 9 tariff, in its February 13, 2015 Order in this docket, the Commission found that only CSG applications deemed complete per the Section 10 tariff would advance to engineering review that all Section 10 applications receive.[223]

In the DOC's April 2, 2015 reply comments, it recommended that the Commission deny Xcel's proposal only to process existing and new applications that are cumulatively one MW or less at a given site. Although the Department stated it shares some of Xcel's concerns about the co-location of numerous community solar gardens and these gardens' eligibility for the same rate structure as smaller gardens, the DOC did not support Xcel's proposal to only process gardens at sites, as defined by the Company, for which the cumulative capacity is one MW or less. The Department does not support Xcel's proposal for the following reasons:[224]

- Defining community solar garden site is not straight-forward. The Commission addressed the difficulty in defining a community solar garden site in their September 17, 2014 Order. For Xcel to process applications in the manner the Company proposes, Xcel would need to determine the amount of physical space between gardens required to qualify garden applications for processing. The Company would also need to evaluate the financial and operational relationships between developers and the organization assigned to the gardens (e.g., limited liability companies) to determine if they are the same company or separate entities. The ability of the Department and Commission staff to verify Xcel's adherence to the Commission's orders and the Company's tariff on the application processing would be diminished under this proposal.

- There are likely unintended consequences of Xcel's proposal. Concerns similar to those aired by Xcel came up in the development of community wind projects. The Department's experience with those projects shows that attempts to place size and customer restrictions to solve one problem end up having unexpected results. The Department foresees situations where developers, trying to work around Xcel's one MW site limit, enter complex agreements with other companies that would submit solar garden applications as types of shell companies, while the main developer actually develops the project. The Department has considered other potential limits on project size, such as limits that could determine a project's eligibility for a possible financial adder used in conjunction with the value of solar, and arrived at similar challenges.

[223] *Id.*, p. 4.

[224] *Id.*, DOC comments in response to the Commissions March 13, 2015 Notice of Comment, April 2, 2015.

- Xcel's proposed retroactive program changes are inconsistent with the Commission's Orders. Xcel proposes to apply their application processing plan to both existing and new applications.

The Department stated that solar developers and communities have made significant investments in CSGs. According to the Department, providing current projects the certainty they need to move forward while the Commission evaluates potential changes for future projects was a prominent theme of past Commission meetings in this docket. The DOC stated that the CSGs program's rules on sizing and location of community solar gardens also impact the project's financing and retroactive changes to the program's site definition would likely have negative impacts on community solar garden financing ability for current and future projects.[225]

Finally, in its February 24, 2015 comments, the DOC wrote that the Commission could consider co-located solar gardens that collectively exceed 10 MW of nameplate capacity as out of scope with Xcel's distribution system interconnection requirements. However, after reviewing other parties' comments on Xcel's interconnection process and in considering the limitations described above, the Department stated in its April 2, 2015 reply comments that it no longer proposes a 10 MW site limit as a solution.[226]

In its April 30, 2015 reply comments the DOC stated that Xcel's retroactive program administration plan as described in its April 28, 2015 Supplemental Comments does not comply with the Commission's Orders and the Company's approved tariffs regarding colocation of community solar gardens. The Department stated that the Commission's Orders are clear regarding the required administration by Xcel of the CSG program and the Department stated it expects Xcel to administer the program and process applications according to the Commission's Orders and the Company's approved tariffs.[227]

On May 1, 2015 the Department filed a separate Motion for an Order to Show Cause that requested, on an expedited basis, that the Commission issue an Order to Show Cause to Xcel requiring the Company to show why the Commission should not:[228]

1) Find that Xcel's retroactive proposal contained in its April 28, 2015 Supplementary Comments to stop processing co-located solar garden applications under its Solar*Rewards Community Program to one MW or less is in violation of the Commission's Orders in this docket; and
2) Order Xcel to process applications consistent with the Commission's Orders in this docket, in particular its decision to allow multiple solar gardens to be installed in close

[225] *Id.*

[226] *Id.*

[227] *Id.*, DOC reply comments in response to the Commission's March 13, 2015, Notice of Comment Period, April 30, 2015, p. 1.

[228] *Id.*, DOC Motion to Show Cause, May 1, 2015.

proximity to each other, and reject any scaling to one MW proposed co-located gardens with an aggregate capacity greater than one MW.

The Department urged the Commission to issue an Order to Show Cause, as described above, to place the burden on Xcel Energy to demonstrate, if it chooses unilaterally to stop processing co-located solar garden applications under its CSG Program to one MW, why it should not be found to be in violation of the Commission's Orders in this matter, and to make clear that time is of the essence with respect to the Company's implementation of the CSG program in accordance with the Commission's Orders and the Company's approved tariffs.[229]

The DOC stated that Xcel's retroactive proposal to limit processing of CSG projects to one MW projects that are not co-located near each other violates the Commission's April 7, 2014 and September 19, 2014 Orders. The DOC asserted that Xcel argues incorrectly that the Commission did not intend to permit multiple one MW solar gardens to co-locate near each other.[230]

The Department acknowledged that Minn. Stat. section 216B1641(b) limits the nameplate capacity for a community solar garden to one MW alternating current (AC) and the Commission's September 17, 2014 Order acknowledges this capacity size, but explicitly permits multiple gardens to co-locate in close proximity to one another. The Department stated that since solar garden capacity is set at one MW, and the Commission's Order states specifically that "multiple Community Solar Garden Sites may be situated in close proximity to one another in order to share in distribution infrastructure," the Commission's Order clearly permits multiple one MW community solar gardens to be co-located. Therefore, the Department concluded that Xcel's proposal to limit processing of co-located community solar garden applications to one MW in aggregate is a violation of the Commission's September 17, 2014 Order. [231]

According to the Department, discussion of the ability to co-locate multiple one MW community solar gardens has occurred on multiple occasions as evidenced by the discussion in the Commission's April 7, 2014 and September 17, 2014 Orders. The Department noted that no party sought reconsideration of those Orders.[232]

In its May 18, 2015 comments the DOC recommended that the Commission order Xcel to refrain from sending any cancellation notices to applicants in the existing queue prior to the Commission's June meeting. In addition, the Department recommended that the Commission direct Xcel to continue processing existing applications for CSGs and their interconnections and the Company should be directed to maintain projects in the queue until the Commission has the opportunity to further address the issues at its June 25 meeting.[233]

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[229] *Id.*

[230] *Id.*

[231] *Id.*

[232] *Id.*

[233] *Id.*

The Department stated it remains concerned that without a Commission Order or other directive prior to the June 25th meeting, Xcel will begin removing CSG applications for co-located gardens greater than one MW from its application system.[234]

The DOC noted that Xcel has not clearly indicated whether its proposal to scale back co-located solar garden applications to one MW applies solely to the garden application in Section 9 of its tariff, or if it would also scale back the corresponding Section 10 interconnection applications. In addition, the Department stated that should the Commission deny Xcel's request to scale back co-locations at its June 25 meeting, solar garden applicants would face the prospect of needing to reapply and possibly losing their existing position in the application queue.[235]

F. Xcel's Response to Parties Objections to its Implementation Plan

In its May 18, 2015 Comments, Xcel stated that based on the eligible applications received to date, it expected to have one of the largest solar gardens programs in the country. Xcel committed also to ensuring the program is implemented in a manner consistent with the CSG statute and Commission Orders and in a way that protects all Xcel customers, whether or not they choose to participate in the CSG program.[236]

To allow the program to move forward, Xcel requested the Commission to issue an Order affirming that its proposed implementation of the program, as set out in its April 28, 2015 filing, is consistent with the CSG statute and prior Commission Orders. Xcel also requested the Commission deny SGC's request for an Order requiring Xcel to accept co-located CSGs that exceed one MW and the DOC's Motion requesting that the Commission issue an Order requiring Xcel to show cause why its proposed actions do not violate prior Commission Orders in this docket.[237]

Xcel stated that the Commission should provide that the one MW garden size limitation in the CSG statute should be enforced for all CSG projects, because this is the best way to ensure a successful program and to balance all customers' interests. In addition to affirming its interpretation of the one MW limitation, Xcel offered a few additional ideas for the Commission's consideration.[238]

- The Commission could rely on the public interest standard to implement annual caps on the program (rather than aggregate caps) to ease the administration of the program and assure that other customers are not harmed.

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[234] *Id.*

[235] *Id.*

[236] *Id.,* DOC comments in response to the Commission's May 1, 2015, Notice of Comment Period, May 18, 2015, p. 28.

[237] *Id.,* p. 28.

[238] *Id.,* pp. 23-24.

- The Commission could require that all CSG program applicants with an aggregate nameplate capacity greater than one MW have purchases made at a FERC avoided cost rate.

- The Commission could modify its tariff to include language that mirrors the Department of Revenue's language to determine single developments where aggregation is proposed.

Xcel stated that the strongest evidence of the program's dysfunction is the volume of applications that have been received, which neither the Company nor the Department anticipated before the program was launched. In fact, Xcel claimed the Company and Department projected fewer MW of projects in the first five years than the 646 MW of projects that have been submitted in the first six months. Xcel asked for the program to be fixed now for all projects, and recently the Office of Attorney General (OAG) joined in sharing the same concerns and offered several solutions for the Commission to consider.[239]

Xcel stated it concurred with the OAG that the right standard for determining how the CSG program moves from here is the public interest standard. According to Xcel, under the public interest standard, the Commission has broad authority to do what is necessary to fix the CSG program.[240]

With how the program has unfolded to date, Xcel stated the following factors support finding that it is in the public interest to fix the program now:[241]

- *Financial Harm to Non-Participating Customers* – placing 646 MW of community solar gardens (CSGs) into service will result in an $80 million annual increase in rates. This represents a nearly $2 billion increase over the life of the CSG contracts.
- *The plain language of the CSG Statute* – the law is clear that projects are not to exceed 1 MW and a program designed consistent with the law will still result in one of the largest solar garden programs in the country.
- *The legislature did not intend for a large utility scale solar program* – lawmakers wanted this program to be for residential and community-based (i.e., churches) customers; not a way for large, load-based customers to be subsidized to leave Xcel's system.
- *Other applicable state statutes are diminished* – the current applicant pool (646 MW) is about the same size as the Calpine combined cycle natural gas unit the Commission approved to move forward, and the total amount of customer based solar Xcel envisioned adding to its system in the next 15 years as part of its Preferred Integrated Resource Plan; yet, the CSG program is occurring outside of the IRP rules and processes, and applications keep coming.

[239] *Id.*, p. 2.

[240] *Id.*

[241] *Id.*, p. 3.

- *Conflicts with federal law* – since each project is a qualifying facility (QF) under PURPA, Xcel stated it believed the program, as designed today, has inconsistencies with federal law.

In fashioning a fix, Xcel stated it does not believe that a grandfathering approach is workable or supportable, since no developer has signed a contract with the Company, and the Commission-approved contract allows for program and contractual changes to be made by the Commission during its term.

According to Xcel, in considering bill credit rates, the Commission relied on what Xcel believed were truthful statements of small developers seeking to develop and finance small garden projects. However, Xcel stated that larger developers did not share with the Commission that the Commission's pricing was sufficient to offer Xcel's largest customers a substantial discount, or that the large developers' business model involved attempting to aggregate multiple large users over many co-located gardens. Xcel asserted that no party should have a reasonable expectation of an outcome that is contrary to explicit statutory directives, or that substantially harms non-participating customers.[242]

Xcel stated further that when these factors are considered and weighed against protecting a few developers, the outcome becomes clear – the Commission should provide that the one MW garden size limitation in the CSG statute should be enforced for all CSG projects. To that end, Xcel requested the Commission issue an Order affirming that its proposed implementation of the program as set out in its April 28, 2015 filing is consistent with the CSG statute and prior Commission Orders, and decline to take the action requested by the SGC and the Department.[243]

FERC Pricing Issues – Xcel stated that establishing the program rules is challenging and can have consequences that cannot be foreseen and the relationship between the program and federal law is such an example. In its February 10 and April 28, 2015 Comments, Xcel also raised concerns that aspects of the CSG program may conflict with FERC rules. Based on its review, Xcel stated it believes there are two issues with the current program design as it relates to federal law:[244]

1) Xcel stated it believes it is exempt from purchasing the power from any solar garden project that is greater than 20 MW. Specifically, any affiliated gardens located within one mile of one another that have an aggregate capacity of 20 MW or more do not have the right to compel Xcel Energy to take their output. There currently are five proposed projects totaling 144 MW in this category and entering into CSG contracts for such projects is inconsistent with FERC's ruling.
2) The proper pricing for QFs under PURPA, and thus CSG projects, is at avoided cost or at a negotiated rate. "Avoided cost" is defined as the incremental energy and capacity cost

[242] *Id.*, pp. 3-4.

[243] *Id.*, p. 4.

[244] *Id.*, p. 4-5.

> the utility would have incurred but for the purchase from the qualifying facility. Under the CSG program, the Company issues bill credits to subscribers for energy delivered to the Company at the Applicable Retail Rate (ARR). In its April 7, 2014 Order, the Commission required the Company to purchase unsubscribed energy from solar-garden operators at Xcel's avoided cost rate for solar gardens larger than 40 kW capacity. The Commission has therefore identified this as the applicable avoided cost rate. If utility-scale solar projects proceed under the CSG program, Xcel stated that the Commission's approved pricing in excess of the established avoided cost rate would violate FERC's rules.

According to Xcel, the current ARR pricing was designed to make the rate high enough to finance solar gardens construction. In contrast, Xcel stated the avoided cost standard was designed specifically to prevent customers from having to subsidize new generation development. Xcel stated further that complying with this standard also ensures that the program does not discriminate against other renewable resources of less than 20 MW, such as wind resources that must meet this standard, and against non-garden solar developments that also must meet this standard.[245]

Xcel stated it was providing this information to support its request to fix the program now for all projects, while recognize getting more clarity around these issues could be helpful for the Commission. However, Xcel stated that since has standing to obtain guidance from the FERC, it could pursue such an option if it would be helpful for the Commission in understanding how to shape the design of this program. To the extent the Commission does not act, Xcel stated it may consider other action necessary to restore the program to its original intent.[246]

Establishing Gardens in Compliance with CSG Statute –Xcel acknowledged that when developers first raised this issue about one year ago, it had indicated its intent to work with them to accommodate cost-effective project design and it has supported reasonable co-location. Xcel stated that, over the past few months, it has become clear that some developers, and the Department, contend the Commission has removed all effective limits on colocation. Xcel stated it does not believe this was what the Commission intended or what is allowed under the CSG statute. Xcel stated that its efforts to work out these issues with the developers and the Department have been unsuccessful.[247]

In response to SGC's April 29, 2015 Petition for Expedited Relief and the Department's May 1, 2015 Motion for an Order to Show Cause, Xcel contended, given the Commission's Notice of Commission Meeting and the fact that Company has taken no action to terminate any project, that neither the DOC's Motion nor the SGC's Petition are ripe for Commission consideration.[248] Xcel stated it had not taken any action that violates the Commission's Orders and there is no

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[245] *Id.,* pp.5-6.

[246] *Id.,* p. 6.

[247] *Id.*

[248] *Id.,* pp. 6-7.

basis for the Commission to grant the requested relief. Further, to the extent the SGC requests that this matter be referred to the DOC or OAG for enforcement action, Xcel contended that such request is also not ripe for consideration. Even accepting the SGC's understanding of Commission Orders, Xcel stated it had not taken any action on the proposal set forth in the April 28, 2015 Comments and under these circumstances, the relief requested by the DOC and the SGC should be denied, and the matters raised by these parties can be addressed by the Commission at its hearing on June 25, 2015.

Xcel also stated that under the terms of its approved tariffed contract, the Commission retains authority to revise at any time the tariffed contract and these revisions apply to all contracts under the program. Xcel tariff, Section 9, Sheet 7 states the following:[249]

> "The Community Solar Garden Operator shall comply with all of the rules stated in the Company's applicable electric tariff related to the Solar*Rewards Community Program and the tariffed version of this Contract, as the same may be revised from time to time, or as otherwise allowed by an amendment to this Contract approved, or deemed approved, by the Minnesota Public Utilities Commission. In the event of any conflict between the terms of this Contract and Company's electric tariff, the provisions of the tariff shall control."

Thus, Xcel requested that the Commission affirm its proposed implementation of the one MW limitation is in accordance with the approved tariffs and existing Orders. According to Xcel, the Commission can act on this request at any time – even after contracts have been signed. Xcel noted, however, that to date no such contract has been executed and as such, no developer could reasonably assume that a contract they have not executed, and which is subject to change by Commission order, created a situation on which they could or should rely.[250]

The Plain Language of the CSG Statute – Xcel stated that since the terms of the CSG statute that a solar garden "must have a nameplate capacity of no more than one megawatt," are clear and unambiguous, the terms of the statute must be applied as written. According to Xcel, both the SGC and the Department concede Minn. Stat. § 216B.1641(b) defines a community solar garden as a facility limited to one MW. To support its claim that the statute authorizes the stringing together of multiple one MW CSGs into a single utility-scale solar development, Xcel stated the SGC relies on this provision in the CSG statute: "There shall be no limitation on the number or cumulative generating capacity of community solar garden facilities other than the limitations imposed under section 216B.164, subdivision 4c, or other limitations provided in law or regulation."[251]

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[249] *Id.,* p. 7.

[250] *Id.,* pp. 7-8.

[251] *Id.,* p. 8.

Xcel stated it believes it is clear, when the CSG statute is read in its entirety, that the "no cumulative generation limits" applies to the total amount of solar-garden capacity in the overall program, not to the size of individual solar garden projects. Otherwise, Xcel claims the one MW size limit is rendered meaningless. Xcel stated that although there is no limit on the number or total capacity of CSGs that may be authorized under the CSG program, this does not permit a 50 MW solar development to be artificially designated as 50 separate one MW gardens in order to avoid the clear statutory size limitation.[252]

In addition, Xcel noted that Minn. Stat. § 216B.164(a) states that there is no limit on the number or cumulative generating capacity of CSGs "other than the limitations imposed under section 216B.164, subdivision 4c, or other limitations provided in law or regulations." Xcel stated that the requirement that the capacity of a CSG not exceed one MW is one such limit that falls under "…other limitations provided in law."[253]

Consistency with Legislative History and the Public Interest – Xcel stated that its review of the legislative history of the CSG statute confirmed the Legislature intended that the primary beneficiaries of the CSG program should be customers who lack access to an appropriate roof location, are unable to afford the up-front costs of an installation, or are discouraged by system maintenance or other considerations and the one MW garden size limitation had been imposed by legislators so "garden" projects remained small and the benefits provided by the CSG program were not available to developers building and operating utility-scale solar projects.[254]

Xcel stated that there is abundant evidence that the Legislature did not intend to promote large utility-scale solar projects, but rather intended the one MW limit to serve as a real and enforceable constraint on the types and sizes of projects that received the favorable rate treatment afforded to community solar gardens and the meaningful implementation of the statutory 1 MW limitation is essential to ensure the program is consistent with the public interest. [255]

As described by Xcel, the CSG program offers premium rates to provide residential and small business customers a realistic opportunity to access distributed solar generation despite their limited land or capital, but a key factor is that these premium rates are paid for by other customers through the Minnesota Fuel Clause. According to Xcel, the one MW limit anticipates and may prevent the significant rate impact and cross-subsidization by customers who do not participate in the CSG Program. Furthermore, Xcel stated that because the relief requested by the SGC would exacerbate the rate impacts on non-subscribing customers, the Commission should deny their request for relief; to uphold the intent of the CSG statute, while at the same time protecting customers.[256]

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[252] *Id.*

[253] *Id.,* pp. 8-9.

[254] *Id.,* p. 9.

[255] *Id.,* pp. 9-10.

[256] *Id.,* p. 10.

Consistency with Prior Commission Orders – Xcel stated that enforcing the one MW size limit is also consistent with prior Commission orders in this proceeding, and it believes it is reasonable to administer the program and interpret the Commission's orders in a manner consistent with the applicable statutory requirements and with the public interest. [257]

In Response to the Department and the SGC's position that Commission Order permits utility-scale solar projects to proceed because the Order provides that "Multiple Community Solar Garden Sites may be situated in close proximity to one another in order to share in distribution infrastructure," Xcel stated it does not believe the Commission has authorized the subdividing of CSG projects as means to evade statutory or regulatory requirements. Xcel stated that nowhere in any of its prior Orders has the Commission stated multiple CSGs may be located near one another such that, in the aggregate, they exceed one MW. However, Xcel asserted that its plan to allow co-located CSGs, but to limit their aggregate capacity to one MW is consistent with the Commission's prior decisions and is necessary to provide meaning to the statutory garden size limit.[258]

Moreover Xcel stated that some developers are interpreting the statute's limitation and the Commission orders differently, and this creates an uneven playing field for potential participants. [259] Xcel stated that while it agrees with the Commission's statement that CSGs may be situated in close proximity to one another in order to share in distribution infrastructure, consisting of CSGs that when added together are one MW or less such as a 100 kW, 250 kW and 500 kW gardens.[260]

Prior Company Statements – Xcel acknowledged that when the issue of CSG close proximity first arose during mid-2014, it had indicated its intent to work with developers and it did support reasonable co-location, based on developers' statements that they expected lean margins under the ARR (and VOS) pricing because minimizing distribution costs would be in the public interest, for projects on a shoestring margin. Xcel explained that in its desire to work with the developers and deliver on the promise of solar gardens, it had failed to appreciate that the representations some developers made about the challenge of building gardens under the ARR was not accurate for developers who remained silent.[261]

Xcel stated that its prior statements should also be put in the proper context. Xcel stated that at the August 7, 2014 Commission hearing, Xcel Energy was careful to note the ability to co-

[257] *Id.,* p. 10.

[258] *Id.,* p. 11.

[259] *Id.* As an example, Xcel gave Next Era Energy Resources (NEER), a solar developer, who submitted comments supporting a strict 1 MW limit. NEER has an application for a site permit for the 62.25 MW Marshall Solar Project pending before the Commission. Xcel Energy will purchase the output under a PPA obtained after a competitive bidding process. NEER stated that it, like Xcel Energy and other developers, incorporated the plain language of the statute in its planning and proposals, and in doing so excluded co-location of facilities above the 1 MW limit. See a summary of NEER Comments above.

[260] *Id.,* pp. 10-11.

[261] *Id.,* p. 12.

located CSGs still left open the issue as to the ability of a developer to take a large project and split it into smaller projects to comply with the statutory cap. A transcript of, Xcel representative, Christopher B Clark is below:[262]

> That said, we also recognize that there are developers out there that are going to create what looks like a very large project, and they're going to divide it by one and say, no, that's actually 10 gardens, they just happen to all be right next to each other. And that we think provides a great vehicle for an opening up of having gardens become something much different than we think was intended by the legislature or this Commission in crafting this order. And so we think it's something that should be carefully worked through and we think the approach you outlined would best accommodate that. So we'd prefer to stay with our language for now and then address this in the work group and with parties who are interested.

Xcel stated that the SGC contention that Xcel was stating that there are no limits is not correct and is taken out of context given the above discussion saying that this is something different than what was intended by the legislature and that this should be worked out in the workgroup.

Xcel noted that the SGC stated "Xcel Energy's representative acknowledged during a public hearing on August 7, 2014, that 'the structure of the program does allow someone to find a large parcel of land and put several one MW projects next to each other…'" However, Xcel claimed that this statement referenced by SGC was part of a discussion regarding how "subscriber" should be defined and was made in the context of highlighting the need for caution with respect to remaining consistent with legislative intent. Xcel representative, Christopher B. Clark, again at the August 7, 2014 hearing:[263]

> I think it comes down to how you view the intent of the statute. So when the City of Minneapolis talks about a rooftop garden that's likely less than one megawatt, that's consistent with how we viewed the intent of gardens. That it was actually an opportunity for people in the community who perhaps couldn't or wouldn't want to have solar on their own rooftop to participate in these. However, the structure of the program does allow somebody to go find a large parcel of land and put several one megawatt projects next to each other and then sign up people who will take 40 percent of garden one, 40 percent of garden two, and then a related entity that will take another 40 percent of garden one, another of garden two, and we think you get a very different outcome than was intended by the statute. And so that's our concern. I think it is just a desire to let this proceed cautiously so that we're careful in both accommodating what large customers and groups want, but that we're also thoughtful about the rate impact and the effects on the system overall to having what we think are a very different outcome than was contemplated in at least our understanding of the statutory intent. So at the

[262] *Id.,* p. 13

[263] *Id.* pp. 13-14.

> end of the day we do believe it's a policy issue, but we think it's an important one to be cautious about.

Ultimately, Xcel acknowledged that the Commission adopted the recommendation upon the agreement of the Company. However, Xcel stated it is not clear, based on the record, that the Commission's decision to adopt the proposed change to the definition of "Community Solar Garden Site" was made with the understanding that this change would be interpreted by the developers to effectively avoid the one MW limit.[264]

In regard to its online 'frequently asked questions' resource, cited by the SGC, which stated:

> "The maximum solar garden system size is 1MW AC. The system size is based on the sum of the inverter(s) maximum AC output. There is no limit to the number of solar gardens which can be placed on a property, but no single garden can exceed the 1 megawatt PV system cap. While there is no program restriction on multiple gardens in one area, there could be technical limitations that could require expensive distribution system upgrades."

Xcel acknowledged this information was not accurate and its later review showed that the statute never contemplated any aggregation above one MW. In its effort to further clarify this point, Xcel stated it updated this frequently asked question in March of 2015 to include only the first two sentences.[265]

Implementing the One MW Cap – Xcel stated that in determining how to implement a one MW cap and identify a single development, it would apply a totality of the circumstances test. For the applications deemed complete and currently in the interconnection queue, the applicants have self-identified that they are co-located in one or more of the following ways:[266]

1) The site plans (or maps) submitted by the developers as part of the engineering review application show all co-located projects on the same map.
2) The co-located project addresses share the same address or have an adjacent address. For example, the addresses could be 1234 Highway 24, Unit 1; 1234 Highway 24, Unit 2, etc.
3) The co-located projects share similar naming conventions. For example, the names could be NeighborhoodX 1, NeighborhoodX 2, etc.

Xcel stated it has concerns that, under any test, developers may attempt to creatively circumvent restrictions on co-location and the Department acknowledged this possibility in its April 2, 2015 Comments. Xcel's totality of the circumstances test includes the above considerations, as well as a review of whether gardens are on the same parcel, and whether gardens are a single development under the Minnesota Solar Production Tax Act (Minn. Stat. § 272.0295) referenced

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[264] *Id.* p. 14.

[265] *Id.*

[266] *Id.*, pp.14-15.

in Xcel's March 4, 2015 Comments. This statute imposes certain taxes on solar production where the solar systems exceed one MW capacity, and Xcel stated it would make sense to look to this statute for guidance on how to define the one MW limit and identify single developments since the legislature implemented this statute within about a year of implementing the solar garden statute. [267]

Xcel stated that the totality of the circumstances test could be applied to the current application queue, which includes projects sized as follows:[268]

Garden Site Size			
Total MW	# of Project Sites	SUM MW	Project % of Total
Less than or equal to 1	23	13.3	23%
Greater than 1 less than 2	8	14.7	8%
2 - 5.99	23	89.8	23%
6 - 9.99	28	209.8	27%
10 - 19.99	15	174.5	15%
20 - 29.99	3	64.0	3%
30	1	30.0	1%
50	1	50.0	1%
Total	102	646.1	100%

The above indicates that based on total MW alone, 23 project sites are eligible, and Xcel stated that the first MW of the remaining 79 sites is eligible under the Company's interpretation of the one MW limit.[269]

Cost Impacts and Conservative Minimum Rates – Xcel stated that if 646 MW come online at current rates, it estimated that the Minnesota Fuel Clause will increase by nearly $80 million annually and that all Minnesota customers will see their cost of fuel rise by 9.3 percent annually. Since the bill credits will be recovered through the Fuel Clause Adjustment, Xcel indicated the cost will impact both program participants and non-participants. However, Xcel stated that if these solar facilities were procured through a competitive bidding process, it estimated that roughly 85% of this cost impact could be eliminated (assuming utility-scale solar energy could be secured at a levelized rate of $73 per MWh) and by reducing the price paid for the output of these solar facilities, Xcel estimated it could reduce the impact to Minnesota fuel costs by roughly $67 million annually (or $1.6 billion over the life of the facilities). In this scenario, Xcel

[267] *Id.,* p. 15.

[268] *Id.,* p. 16.

[269] *Id.*

expected the additional competitively bid solar resources to increase the current Minnesota fuel costs by roughly 1.5 percent, rather than 9.3 percent under ARR pricing. [270]

OAG Recommendations – Xcel stated it appreciated the focus of the OAG on limiting harm to customers through its recommendations to set a maximum harm level and the suggestion to pair an overall harm limit with a minimum capacity threshold for the program. Xcel agreed that the quantities set forth for the program in the recently filed IRP supplement would provide a reasonable framework for these targets. Further, Xcel stated it believes the public interest requires a limit to the exposure of customers to harm as a result of this program, and it agreed with the OAG that the law does contemplate program limits consistent with the public interest that are set by regulators.[271]

G. Staff Comments

The determination of whether Xcel's plan for implementing the CSG program, and limiting proposed co-located gardens to an aggregate capacity of no greater than one MW, is in compliance with past Commission Orders and Minn. Statutes impacts the remaining issues before the Commission in this proceeding.

For example, if the Commission decides that the Xcel's plan for administering its CSG program does comply with past Commission Orders and Minn. Statutes, then a determination on rates going forward, while important, becomes less imperative if the cumulative MW in the CSG application queue drops from 646 to 102. The rate impacts will be lessened and there will not be a need for the Commission to decide whether to bifurcate the bill credit rate for co-located gardens greater than one MW going forward.

However, if the Commission decides that Xcel's plan for administering its CSG program is not in compliance with past Commission Order and Minn. Statutes, then the need for determining bill credit rates going forward becomes much more imperative, given the current bill credit rate (ARR + REC) has led to applications for 646 MW in CSGs and counting during the first year of the program.

If the Commission decides in favor of SGC's position, there are a range of options for addressing the concerns surrounding large multi-garden developments going forward. These include rate adjustments (e.g. use of VOS rate, or varied rates based on garden size or subscriber type), requirements for garden subscriber diversity, or an approach such as OAG has suggested. These options will take additional time to develop, and they will not impact CSG projects currently in the Queue.

The Commission may also determine to set a cap other than one MW, such as the 10 MW limitation proposed by TruNorth Solar, Novel Energy Solutions and originally proposed by the Department. In making a determination set a cap larger than one MW, the Commission will need

[270] *Id.,* p. 17.

[271] *Id.,* p. 18.

to consider whether to apply the cap only for new projects going forward or to also apply the cap to all current projects in Xcel's current application queue.

Commission Decision Options – Multiple CSG development projects (co-location)

1. Is Xcel's plan for implementing the CSG program, and limiting proposed co-located gardens to an aggregate capacity of no greater than one MW, in compliance with past Commission Orders and Minn. Statutes?

    a. Find Xcel's proposed implementation of the CSG program as set out in its April 28, 2015 Supplemental Comments complies with the CSG statute and prior Commission Orders.

    b. Find Xcel's proposed implementation of the CSG program as set out in its April 28, 2015 Supplemental Comments does not comply with the CSG statute and prior Commission Orders.

    c. Order Xcel Energy to process applications consistent with the Commission's Orders in this docket, in particular its decision to allow multiple solar gardens to be installed in close proximity to each other, and reject any scaling to one MW proposed co-located gardens with an aggregate capacity greater than one MW

    d. Issue an Order to Show Cause to Xcel requiring the Company to show why the Commission should not find that Xcel Energy's proposal contained in its April 28, 2015 Supplementary Comments to stop processing co-located solar garden applications under its Solar*Rewards Community Program to one MW or less is in violation of the Commission's Orders in this docket.

Section Two: Bill Credit Rate

A. Statements of Issues

1. Should the Commission approve Xcel's updated Applicable Retail Rates filed on March 2, 2015?
2. Should the Commission find that Xcel's Calculation of the Value of Solar Calculation is correct?
3. What should the subscriber bill credit rate be for CSGs going forward?

B. Background

Minn. Stat. §216B.1641, Subd. (d) states the following

> (d) The public utility must purchase from the community solar garden all energy generated by the solar garden. The purchase shall be at the rate calculated under

> section 216B.164, subdivision 10, or, until that rate for the public utility has been approved by the commission, the applicable retail rate.

Minn. Stat. § 216B.164, subd. 10, (VOS statute) allows a public utility to seek Commission approval of an alternative tariff that compensates customers via bill credits for the value to the utility, its customers, and society from operating distributed solar photovoltaic resources. The alternative tariff's rates would replace the net-metering rates under Minn. Stat. § 216B.164, subds. 3 and 3a, for distributed solar-generation facilities that interconnect after the tariff's effective date. Payment of the value-of-solar rate entitles a utility to the RECs associated with the energy purchased.[272]

The statute requires the Department to establish, and the Commission to approve, a methodology for utilities to use in calculating their utility-specific value-of-solar tariff rates. This methodology must, at a minimum, account for the value of solar energy and its delivery, generation capacity, transmission capacity, transmission and distribution line losses, and environmental value.[273]

The Commission issued an order approving the Department's VOS methodology, as modified, on April 1, 2014. The VOS statute does not provide a timeframe for Xcel's tariff filing[274] and Staff notes that Xcel has not filed a VOS tariff for the Commission's review to date.

In the Commission's April 7, 2014 Order Rejecting Xcel's Solar-Garden Tariff Filling, the Commission concluded that the statutory "applicable retail rate" is a CSG subscriber's full retail rate. Therefore, in the absence of an approved VOS rate, the Commission required Xcel to credit each subscriber's portion of the solar-garden production at the applicable retail rate, which is the full retail rate, including the energy charge, demand charge, customer charge, and applicable riders, for the customer class applicable to the subscriber receiving the credit.[275]

The Commission's April 7, 2014 Order explains its reasoning for setting the rate as it did. The CSG statute mandates that any plan approved by the Commission must reasonably allow for the creation, financing, and accessibility of solar gardens, and the record demonstrated that the full retail rate, approximately $0.12 per kWh, is too low to reasonably allow for the creation and financing of CSGs. Rather, the Order states that developers' uncontroverted statements indicate that a rate of approximately $0.15 per kWh is the conservative minimum needed to secure financing and make solar gardens attractive to subscribers. For these reasons, the Commission allowed the garden operator or developer to transfer the solar RECs to Xcel at a compensation rate of $0.02 per kWh for solar gardens with a capacity greater than 250 kW and $0.03 for solar gardens with a capacity of 250 kW or less. Finally, to ensure that solar-garden energy is not

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[272] Docket No. E-002/M-13-867, *Order Rejecting Solar-Garden Tariff Filing and Requiring the Company to File a Revised Solar-Garden Plan*, April 7, 2015, p. 4.

[273] *Id.*

[274] *Id.*

[275] *Id.*, p. 15.

devalued over time by inflation, The Commission required the applicable retail rate and solar REC value will be reviewed annually and adjusted accordingly.[276]

Specifically, the Commission's April 7, 2014 Order Rejecting Xcel's Solar-Garden Tariff Filling, ordering paragraphs 9 through 12 outlines the rate, the REC price, and the annual process to review the rate:[277]

> 9. Xcel shall credit each subscriber's portion of the solar-garden production at the applicable retail rate, which shall be the full retail rate, including the energy charge, demand charge, customer charge and applicable riders, for the customer class applicable to the subscriber receiving the credit.
>
> 10. The solar-garden operator or developer may transfer the solar RECs to Xcel at a compensation rate of $0.02 per kWh for solar-garden facilities with capacity greater than 250 kW and $0.03 for solar-garden facilities with capacity of 250 kW or less.
>
> 11. The applicable retail rate and solar REC value must be reviewed annually and adjusted accordingly. At such time as the Commission may issue an order approving a value-of-solar rate for solar gardens, the applicable retail rate and the solar REC value will expire according to the schedule set forth in that order."
>
> 12. No solar-REC value shall be paid if the solar garden has received or intends to accept a Made in Minnesota benefit, pursuant to Minn. Stat. §§ 216C.411–.415 or a Solar*Rewards benefit, as defined in Minn. Stat. § 116C.7792.

The Commission's September 17, 2014 Order Approving Solar-Garden Plan, the Commission concluded that the most prudent course of action was to use the ARR and REC prices set in the Commission's April 7 order. While the VOS rate might provide greater predictability over time, the Commission found it is much lower initially than the ARR and significantly below the level needed to support the financing and development of solar gardens as required by the applicable statute.[278]

The September 17, 2014 Order stated that one way to bring the VOS rate up to a financeable level would be to employ an incentive or adder. However, the transparency offered by the value-of-solar rate would be sacrificed if care is not taken in selecting and justifying the appropriate value for an adder and the Commission was not convinced that an appropriate incentive could be determined from record. Therefore, the Commission directed the parties to engage in further discussions and to file comments by October 1, 2014, regarding the appropriate adder, if any, to apply in conjunction with a

[276] *Id.*

[277] *Id.*, Ordering ¶¶9-12, pp. 27-28.

[278] *Id., Order Approving Solar- Garden Plan with Modifications,* September 17, 2014, p. 9.

proposed VOS rate to ensure that the CSG program reasonably allows for the creation, financing, and accessibility of solar gardens.[279]

In addition, the Commission set a March 1 deadline for Xcel to file annual VOS inflation updates and updated rate calculations using the Department's methodology. Specifically, the Commission Ordered the following in it September 17, 2014 Order[280]

> 2. The Commission finds that it is not in the public interest to use the value-of-solar rate, as calculated under Minn. Stat. § 216B.164, subd. 10, for community solar gardens at this time; instead, Xcel shall continue to use the applicable retail rate with the option for community-solar-garden operators to transfer solar RECs to Xcel at the compensation rates set in the Commission's April 7, 2014 order.
>
> 3. Xcel shall clarify the following in its tariff with respect to the use of the applicable retail rate and REC payments:
>
> a. Community-solar-garden projects filing complete applications under the applicable retail rate should be able to lock in the REC price for the duration of the 25-year contract;
>
> b. Community-solar-garden projects under the applicable retail rate should be credited at the applicable retail rate in place at the time of energy generation for the duration of the 25-year contract; and
>
> c. Any adjustment to REC prices made by the Commission in later years should only apply to new community-solar-garden project applications.
>
> 4. The Commission directs the parties to engage in further discussions and to file comments by October 1, 2014, regarding the appropriate adder, if any, to apply in conjunction with a proposed value-of-solar rate to ensure compliance with the community-solar-garden statute, including, but not limited to, a requirement that the community-solar-garden plan approved by the Commission reasonably allow for the creation, financing, and accessibility of community solar gardens.
>
> 5. Xcel shall file annual value-of-solar inflation updates and updated rate calculations by March 1, using the approved methodology.

C. Applicable Retail Rate

1. Calculation

[279] *Id.*, pp. 9-10

[280] *Id.*, Ordering ¶¶2-4, pp. 18-19.

On March 2, 2015, in its ARR Compliance Filing, submitted its updated applicable retail rate (ARR) calculation in compliance with the Commission's September 17, 2014 Order.

Xcel stated that the Bill Credit Rate below applicable to the subscriber is dependent on the customer class under which the subscriber receives service and the Bill Credit Type selected by the garden operator in the tariffed Standard Contract for Solar*Rewards Community.[281]

Customer Class	Bill Credit Type	Bill Credit Rate per kWh (AC) for Energy Delivered to Company
Residential Service	Standard	$0.12743
	Enhanced – Solar Gardens > 250 KW (AC)	$0.14743
	Enhanced – Solar Gardens ≤ 250 KW (AC)	$0.15743
Small General Service	Standard	$0.12431
	Enhanced – Solar Gardens > 250 KW (AC)	$0.14431
	Enhanced – Solar Gardens ≤ 250 KW (AC)	$0.15431
General Service	Standard	$0.09914
	Enhanced – Solar Gardens > 250 KW (AC)	$0.11914
	Enhanced – Solar Gardens ≤ 250 KW (AC)	$0.12914

Only the Department filed Reply Comments on Xcel's Calculation of its ARR. . The Department stated it reviewed Xcel's filed updated ARR calculations by subscriber customer class and concluded that the Company's ARR calculations comply with the Commission's April 7, 2014 Order. Therefore, the Department recommended that the Commission approve Xcel's updated Applicable Retail Rates filed March 2, 2015.[282]

2. Procedure for Annual Rate Updates

Xcel noted that the Commission's Order makes clear that Xcel will file annual updates to its ARR tariff, reflecting its calculation of new bill credit rates for subscribed energy, but the Order does not set forth a procedural schedule for such updates. Xcel proposed to file its annual updates to the Standard and Enhanced bill credit rates on February 1 annually and that the rates

[281] *Id.*, Xcel Compliance Filing – ARR Calculation, March 2, 2015.

[282] *Id.*, The Department's Comments in Response to the Commission March 13, 2015 Notice of Comment Period, April 2, 2015, p. 2.

would then be effective annually on April 1. Xcel stated it believes this timeframe would balance all parties' interests in certainty, efficiency, and in providing an opportunity for review.

The Department noted that Minnesota Statute § 216B.16 states that no public utility shall change an established rate except upon 60 days' notice to the Commission, unless the Commission otherwise orders and that Xcel's filing proposal for the ARR complies with Minnesota Statute §216B.16. Therefore, the Department agreed with the Company's proposed filing dates.

D. Value of Solar (VOS) Rate

In its March 2, 2015, VOS Compliance filing Xcel submitted its updated VOS calculation in compliance with the Commission's September 17, 2014 Order. The VOS Table is given below.[283]

CURRENT POSITION *25 Year Levelized Values*	**Economic Value ($/kWh)**	**Load Match (No Losses) (%)**	**Distributed Loss Savings (%)**	**Distributed PV Value ($/kWh)**
Avoided Fuel Cost	$0.0319	48.6%	9.8%	$0.0350
Avoided Plan O&M - Fixed	$0.0022		10.8%	$0.0012
Avoided Plan O&M - Variable	$0.0028		9.8%	$0.0031
Avoided Gen Capacity Cost	$0.0473	48.6%	10.8%	$0.0255
Avoided Reserve Capacity Cost	$0.0034	48.6%	10.8%	$0.0018
Avoided Trans Capacity Cost	$0.0308	48.6%	10.8%	$0.0166
Avoided Distribution Capacity Cost	$0.0365	55.2%	13.2%	$0.0228
Avoided Environmental Cost	$0.0277		9.8%	$0.0304
Avoided Voltage Control Cost				
Solar Integration Cost				
TOTAL				**$0.1364**

The Department again was the only party to comment on Xcel's VOS calculation. With a minor update to the environmental discount rate, the Department concluded that the Company's calculation of the VOS rate is correct and the resulting rate is $0.1075/kWh for 2015.[284]

E. Financeable Rate

[283] *Id.*, Xcel Compliance Filing – VOS Calculation, March 2, 2015.

[284] *Id.*, The Department's Reply Comments in Response to the Commission March 13, 2015 Notice of Comment Period, April 30, 2015, p. 1-2.

1. The Appropriate Adder, if Any, to Apply in Conjunction with a Proposed VOS Rate.

The Commission's September 17, 2015 Order determined that it is not in the public interest to use the value-of-solar rate, as calculated under Minn. Stat. § 216B.164, subd. 10, as the bill credit rate for CSGs. Instead, the Commission required that Xcel shall to use the ARR with the option for community-solar-garden operators to transfer solar RECs to Xcel at the compensation rates set in the Commission's April 7, 2014 order. The Order further directed the parties to engage in discussions and to file comments regarding the appropriate adder, if any, to apply in conjunction with a proposed value-of-solar rate to ensure compliance with the community-solar-garden statute, including, but not limited to, a requirement that the community-solar-garden plan approved by the Commission reasonably allow for the creation, financing, and accessibility of community solar gardens.

Several parties suggested that the VOS rate, as it applies to CSGs, should be at least as high as the ARR + REC and therefore some adder is needed to bridge the gap to get the VOS rate to this level. These parties agreed with the Commission's April 7, 2014 finding that "… $0.15 per kWh was the conservative minimum needed to secure financing and make solar gardens attractive to subscribers."[285] In addition, some parties emphasized, if the Commission transitions to a VOS rate, it should apply the VOS rate on prospective basis only[286] and that a transition to a VOS rate should be optional.[287]

Although current calculations indicate that the VOS may be lower than the ARR that is currently applied to CSG programs, the OAG stated that, there are several reasons why transitioning to the VOS may have only limited benefits. First, the OAG noted that Xcel has argued that the Commission cannot order it to switch to the VOS. Second, the OAG stated that even if the Commission's authority to order the VOS rate was not questioned, any benefit provided to non-participants could be delayed. The OAG noted that the VOS statute provides that the Commission "may not authorize [a VOS rate] that is lower than the [ARR]" for at least three years after the utility's VOS is approved. Third, the OAG stated that it is not clear that the

[285] *Id.*, See Minnesota Renewable Energy Society (MRES) Comments in response to the Commission's September 17, 2014 Order Approving Plan, September 30, 2014. A Work of Art Solar Sales Comments in response to the Commission's September 17, 2014 Order Approving Plan, October 1, 2014. Kandiyo Consulting Comments in response to the Commission's March 13 Notice of Comment Period, April 2, 2015. Sundial Solar Comments in response to the Commission's September 17, 2014 Order Approving Plan, October, 1, 2014. Minnesota Community Solar (MNCS)Comments in response to the Commission's September 17, 2014 Order Approving Plan, October 1, 2014. SoCore Energy Comments in response to the Commission's September 17, 2014 Order Approving Plan, October 1, 2014. Minnesota Solar Energy Industry Association (MnSEIA) Comments in response to the Commission's September 17, 2014 Order Approving Plan, October 1, 2014

[286] *Id.*, See for example, Sunrise Energy Venture's, LLC, Comments in response to the Commission's January 28, 2015 Notice Extending Comment Period, March 2, 2015.

[287] *Id.*, A Work of Art Solar Sales Comments in response to the Commission's September 17, 2014 Order Approving Plan, October 1, 2014. Sundial Solar Comments in response to the Commission's September 17, 2014 Order Approving Plan, October 1, 2014.

incremental reduction from the ARR to the VOS would actually change the status quo of the CSG program, because the Commission has little information on the relationship between the CSG rate and the how much it costs developers to supply CSGs. In addition, the OAG stated it is not clear that changing to the VOS would reduce harm for nonparticipants since many parties that have recommended such a change have also suggested applying adders to increase the VOS rate. Finally, many of the unintended consequences with the CSG program have arisen because the bill credit rate is a flat rate, rather than because the flat rate is set at a particular level. As a result, the OAG stated that changing from the flat-rate ARR to the flat-rate VOS may do very little to change the weaknesses of the CSG program. The OAG claimed that the economic reality of CSG developments is that developers have an incentive to propose large scale projects in order to take advantage of economies of scale, which contributes to the problems of focusing the benefits of the program to large energy consumers.[288]

In regard to the VOS rate, Xcel stated that should the Commission find that the public interest does support the use of the VOS for CSG, it noted that it does not interpret either the CSG statute or the VOS statute to require the utility to file an alternative tariff for CSG projects. Xcel stated it believes that the utility has discretion in filing an alternative tariff. However, if the Commission disagrees with this interpretation of statute and orders the Company to file an alternative tariff for CSG, Xcel requested the Commission create a checkpoint to fully evaluate whether the rate remains in the public interest for all customer classes.[289] With respect to a migration from the ARR to the Value of Solar (VOS), Xcel stated it takes no position at this time as to when it might file an alternative tariff for use in Solar*Rewards Community. Xcel stated further that it has no imminent plans to file an alternative VOS tariff and, for this reason, it does not believe the Commission needs to further explore the use of an incentive to be added to the VOS at this time.[290]

Further Xcel noted, however, that the use of the VOS is predicated on generation sized one MW or less. Xcel stated that the utility-scale project sites it has received in its application system do not appear to qualify for a VOS rate, based on this size limitation in statute.[291]

2. ARR plus the REC

There were many parties that favored keeping the current rate structure in place as set in the Commission's April 7, 2014 order. It was suggested that the Commission needs more data to analyze the CSG Program and Community Solar market before it transitions away from the ARR

[288] *Id.*, The Office of Attorney General – Residential Utilities and Antitrust Division Reply Comments in response to the Commission's March 13, 2015 Notice of Comment Period, April 30, 2014.

[289] *Id.*, Xcel Comments in response to the Commission's September 17, 2014 Order Approving Plan, October 1, 2014.

[290] *Id.*, Xcel Comments in response to the Commission's March 13, 2015 Notice of Comment Period, April 2, 2015.

[291] *Id.*

+ REC bill credit rate to a VOS based rate.[292] TruNorth Solar, LLC, SunShare, LLC, Kandiyo Consulting, LLC and MnSEIA recommended that, at minimum, the Commission should maintain the current bill credit formula for CSGs through 2016.[293] The Department also recommended that the Commission postpone a decision on the transition to a VOS rate until 2016.[294]

The Minnesota Rural Electric Association (MREA) disagreed and stated that has become increasingly concerned with the response to the provision in Minn. Stat. § 216B.1641 that requires the plan to "reasonably allow for the creation, financing, and accessibility of community solar gardens." According to MREA, based on its experience, CSG projects can be designed, financed and built without the level of subsidy that solar developers and advocates have been demanding in this docket.

Xcel noted in its October 1, 2014 Comments that, in its April 7, 2014 Order, the Commission adopted a formula for the ARR for CSGs that built on the Company's A50 cogeneration rates and included customer and demand charge revenues, as well as a REC payment, to be factored into the bill credit rate for community solar. Xcel stated that because the customer charge is designed to recover the costs of a service to a house, it does not believe including the customer charge in a bill credit rate for community solar is appropriate. Xcel suggested that the Commission consider options for revisiting the bill credit rate, and eliminate the customer charge from the formula.[295]

Xcel noted the lack of an evidentiary record to support claims that either $0.15/kWh or the current applicable retail rates (ARR) are needed for solar garden financing. Xcel stated the response to its launch of the CSG program is a market signal that speaks to its conclusion that the current ARR is set higher than a "conservative minimum" pricing structure would be. Xcel emphasized that it believes the Commission should require competitive bidding in its rate structure, including its REC incentive, to find market-based solutions to the question of minimally financeable rates. Xcel stated it was opposed any additional incentives be added to the ARR structure. Because the market has signaled that current rates are in excess of minimally

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[292] *Id.,* Minnesota Community Solar (MNCS) Reply Comments in response to the Commission's January 28 Notice Extending Comment Period, March 2, 2015. Minnesota Solar Energy Industry Association (MnSEIA) Comments in response to the Commission's September 17, 2014 Order Approving Plan, October 1, 2014

[293] *Id.,* Kandiyo Consulting Comments in response to the Commission's March 13 Notice of Comment Period, April 2, 2015. SunShare, LLC Comments in response to the Commission's March 13 Notice of Comment Period, April 2, 2015. TruNorth Solar, LLC, Revised Reply Comments in response to the Commission's March 13 Notice of Comment Period, May 4, 2015. MnSEIA Comments in response to the Commission's March 13 Notice of Comment Period, April 2, 2015.

[294] *Id.,* The Minnesota Department of Commerce's Reply Comments in response to the Commission's January 28, 2015 Notice Extending Comment Period, March 2, 2015.

[295] *Id.,* Xcel Comments in response to the Commission's September 17, 2014 Order Approving Plan, October 1, 2014, p.

financeable rates, and Xcel stated it believes further stimulation of the market is unnecessary and outside the public interest at this time.[296]

3. Proposed Incentive Design Structures

In its December 1, 2014 Reply Comments, the National Group recommended that the Commission should consider a "capacity block" incentive structure; whereby the initial incentive price bumps down through a series of step-wise blocks of capacity. Under this structure, the VOS adder would move incrementally downward as capacity targets are reached; the faster the market response to the program, the faster the capacity blocks are subscribed, and the faster the incentive price bumps down. The National Group suggested that the capacity block programs also be designed to bump prices back up if a block of capacity is not fully subscribed after a predetermined amount of time.[297]

In their March 2, 2015 Reply Comments the Joint Commenters agreed with the National Groups that the Commission should consider a "Capacity-Block" incentive program to adjust CSG Bill Credits towards the VOS rate along a transparent, sustainable schedule. The Joint Commenters stated they strongly recommend the further consideration of a declining capacity block program to adjust CSG bill credits for future projects; and if the Commission moves to a VOS-based rate for future projects, the Joint Commenters recommended that the capacity block program would focus on any adders the Commission determines are necessary.[298]

Xcel also suggested the Commission could consider an incentive design for a framework that best responds to changing market conditions over time. Xcel stated that the early years of its CSG program will provide the best source of data on the key uncertainties all parties face, including what garden operator business models are most successful, what bill credit rate framework is most appropriate, and whether the Xcel remains on track to meet its obligations under the SES. If the Commission decides to remain with the currently approved Applicable Retail Rate, Xcel encouraged the Commission to consider strategies for finding the "market price" as it relates to the current REC incentive option of $0.02 or $0.03/kWh. Xcel suggested three incentive design options similar to the National Group's "Capacity Block" suggestion.

1) *Declining Incentive Schedule*: sets forth a schedule under which the incentive levels decline over time and/or as capacity or budget targets are met.

[296] *Id.*, Xcel Comments in response to the Commission's March 13, 2015 Notice of Comment Period, April 2, 2015.

[297] *Id.*, The Environmental Law & Policy Center (ELPC), the Interstate Renewable Energy Council (IREC), and the Vote Solar Initiative (Vote Solar) (collectively "NATIONAL Groups") Reply Comments in response to the Commission's October 9, 2014 Notice of Reply Period, December 1, 2014.

[298] *Id.*, Fresh Energy, Environmental Law and Policy Center, Institute for Local Self-Reliance, and Izaak Walton League of America (Joint Commenters) Reply Comments in response to the Commission's January 28, 2015 Notice Extending Comment Period, March 2, 2015.

2) *Competitive Procurement*: A competitive bidding as its market-driven mechanism. The utility solicits bids from potential solar developers via a Request for Proposals (RFP), and evaluated on standard selection criteria. Once the "market price" is determined by the RFP process, that price forms the basis of the Standard Offer program. A $.02 premium is then added to the Standard Offer Program level. Xcel stated a competitive procurement process might be implemented as follows:

    i. Solicit competitive bids for gardens development at a proposed bill credit rate in March of each year following approval of an annual rate update.
    ii. Accept the lowest cost bids up to 5 MW and process applications in sequence from successful bidders.
    iii. The incentive level is set for all based on the highest bid price among the first 5 MW bidders less the current bill credit rate.
    iv. [OPTIONAL] Open the program to all applicants in October of each year at the bid price established in the competitive procurement process.
    v. Repeat annually.
    vi. Garden Operators wishing to forego any incentive may apply at any time and would not be bound by the competitive procurement process described above.

3) *Competitive Upfront Incentive to Garden Operator*: This option would generally follow the same competitive procurement process described above with key modifications. Instead of offering a financial incentive in the form of a per kWh subscriber bill credit, the Company could offer an upfront incentive (or rebate) payment directly to the garden operator. A competitive upfront incentive process might be implemented as follows:

    i. Solicit competitive bids for gardens development for an up-front incentive level in January of each year (either through RFP or reverse auction).
    ii. Accept the lowest cost bids up to 5 MW and process applications in sequence from successful bidders.
    iii. The incentive level is set for all successful bidders based on the highest bid price among the first 5 MW bidders. The incentive is in the form of a onetime, up-front capacity-based payment made to the garden operator.
    iv. [OPTIONAL] Open the program to all applicants in October of each year at the bid price established in the competitive procurement process.
    v. Repeat annually.
    vi. Garden Operators wishing to forego any incentive may apply at any time and not bound by the competitive procurement process.

Similar to the National Group and Xcel's declining incentive schedule, the OAG proposed a variable rate plan to take advantage of price signals to better align the rate for CSG projects with the amount of CSG capacity that the Commission determines is consistent with the public interest. Because the rate for CSGs has a direct relationship to how many CSG programs are proposed (the higher the rate, the more proposals), the OAG suggested that achieving the "right" number of proposals, or number of megawatts, is a policy decision that the Commission must make. The OAG suggested further that a variable rate would allow the bill credit to change based

on whether the Commission's goal for CSG production was accomplished or exceeded, and this would be a better tool than a flat rate for ensuring that the goals of the CSG program are achieved without excessive harm for nonparticipants. While a variable rate could provide solutions to some of the current problems with the CSG program, the OAG noted that the Commission has already defined the ARR in a manner that prohibits any variability. Therefore, according to the OAG, it may not be possible to implement a variable rate in the CSG program unless the Commission expands its understanding of the meaning of "applicable retail rate," or there is legislative change.

4. Rates for Co-located Gardens

In its May 18, 2015 Comments Xcel noted again parties did not take advantage of the additional opportunities the Commission has provided to supplement the record with evidence that $0.15/kWh "is or is not the conservative minimum required to reasonably finance" CSGs. Xcel stated that while it is possible that $0.15/kWh is a minimally financeable rate where gardens are built to a meaningful one MW standard, that assessment is less clear when gardens are planned in the aggregate. Xcel stated it takes no issue with compliant garden development proceeding under the ARR, provided the formula bears out the conservative minimum needed to reasonably create gardens, and it looks forward to bringing those gardens online.[299]

However, Xcel stated it does take issue with utility-scale solar developers attempting to gain access to a rate intended for one MW or smaller projects and this circumvention of the law has also frustrated the Commission's inquiry into the "conservative minimum" rates, undermined the appropriateness of the rate design, exacerbated the customer impacts of the program, and distorted the marketplace.[300]

TruNorth Solar agreed and stated it believes that the ARR+REC rate ordered by the Commission unfairly compensates for the energy produced by systems benefiting from the natural economies of scale over 10 MWAC. TruNorth stated there is an uneven playing field given the amount of co-located projects in excess of 10 MW resulting in a very challenging market place in which to sell subscriptions, and therefore asked the Commission impose a 10 MWAC limit to co-locating CSGs to allow for fair value under the ARR + REC for distributed-sized energy sources. Without such a limit TruNorth Solar claimed those who have pursued distributed community solar projects consistent with the spirit and intent of the law will be unfairly harmed.[301]

Should the Commission decide that co-located projects over 10MW in size are allowable, TruNorth Solar suggested that the Commission allow Xcel to review these projects through a competitive bid process similar to the competitive solicitation process used by Xcel for large

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[299] *Id.,* Xcel Comments in response to the Commission's May 1, 2015 Notice of Comment Period, May 18, 2015.

[300] *Id.*

[301] *Id.,*TruNorth Solar, LLC, Comments in response to the Commission's May 1, 2015 Notice of Comment Period, May 18, 2015.

utility-scale solar procurements and its Colorado Solar*Rewards Community program for larger CSGs.[302]

The Joint Commenters recommended that the Commission change the bill credit for new projects co-locating multiple one MW gardens to a VOS-based rate for General Service customers. [303] SunShare stated its agreement with the Joint Commenters' assertion that the bill credit formula for larger co-located projects could potentially be modified to reflect economies of scale associated with those projects on a going forward basis.[304]

5. Incentives for Brownfields and other strategic locations

The National groups stated that the Commission should consider modifying the CSG program to reward and incentivize projects that are located in highly desirable locations on Xcel's distribution grid or that provide additional public benefits, such as the revitalization of urban brownfield areas. The National Group suggested bill credit adders or other mechanisms to promote CSG development on brownfields or other strategic locations on the distribution grid.[305]

F. Staff Comments

Staff agrees with the Department that Xcel's calculation of the VOS and the ARR is correct. Staff also agrees with parties that the Commission would benefit from having more data on the number of projects that were completed during the initial year of Xcel's CSG program. Staff notes that, while over 600 MW of proposed CSGs are currently in Xcel's application queue, there are not any CSGs that are currently operating, nor subscribers receiving the bill credit rate. As has been pointed out by parties, it is possible that the 2015 construction season will end without a single CSG operating under Xcel's CSG program. Given this uncertainty, if the Commission determines that Xcel's implementation plan for administering the CSG program complies with past Commission Orders and the CSG statute, then Staff agrees that the Commission may wish to consider postponing a decision on updating the bill credit rate and transitioning to VOS rate until 2016. However, if the Commission determines that Xcel's implementation plan does not comply with past Commission Orders and the CSG statute, then the Commission may wish to address the bill credit rate for co-located gardens with an aggregate capacity greater than one MW on a going forward basis.

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[302] *Id.*

[303] *Id.*, Fresh Energy, Environmental Law & Policy Center and Institute for Local Self- Reliance (Joint Commenters) Comments in response to the Commission's May 1, 2015 Notice of Comment Period, May 18, 2015.

[304] *Id.*, SunShare, LLC Reply Comments in response to the Commissions, March 13, 2015 Notice of Comment Period, April 30, 2015, p. 6.

[305] *Id.*, The Environmental Law & Policy Center (ELPC), the Interstate Renewable Energy Council (IREC), and the Vote Solar Initiative (Vote Solar) (collectively "NATIONAL Groups") Reply Comments in response to the Commission's October 9, 2014 Notice of Reply Period, December 1, 2014

G. Commission Alternatives

1. Whether to approve Xcel's calculation of the Applicable Retail Rate filed in its March 2, 2015 ARR Compliance Filing.

    a. Approve Xcel's calculation of the Applicable Retail Rate filed in its March 2, 2015 ARR Compliance Filing; or
    b. Do not approve Xcel's calculation of the Applicable Retail Rate filed in its March 2, 2015 ARR Compliance Filing.

2. Whether Xcel's calculation of the Value of Solar Rate as filed in its March 2, 2015 VOS Compliance Filing, and as updated according to the Department's April 30, 2015 Reply Comments is correct

    a. Find Xcel's calculation of the Value of Solar Rate as filed in its March 2, 2015 VOS Compliance Filing, and as updated according to the Department's April 30, 2015 Reply Comments is Correct; or
    b. Find Xcel's calculation of the Value of Solar Rate as filed in its March 2, 2015 VOS Compliance Filing, and as updated according to the Departments April 30, 2015 Reply Comments is not correct.

3. Whether to transition from an ARR rate to a VOS rate

    a. Transition to a VOS rate for all projects on a going forward basis beginning in 2016; or
    b. Take no Action

4. What is an appropriate Adder, if any, to apply in conjunction with a proposed VOS rate to ensure compliance with the community-solar-garden statute, including, but not limited to, a requirement that the community-solar-garden plan approved by the Commission reasonably allow for the creation, financing, and accessibility of community solar gardens?

    a. Determine that the adder should be set at a level needed to bring it at least as high as the current enhanced bill credit rate as found in Xcel's tariff (ARR + REC);
    b. Set the adder at some other level; or
    c. Take no action

5. Whether to adjust the current Applicable Retail Rate.

    a. Adjust the Applicable Retail Rate going forward by eliminating the customer charge from the formula; or
    b. Take no Action

6. Whether to introduce an incentive design framework to bill credits rates going forward

    a. Require competitive bidding in its rate structure, including its REC incentive, to find market-based solutions to the question of minimally financeable rates (Xcel Option).
    b. Set a declining incentive schedule under which the incentive levels decline over time and/or as capacity or budget targets are met (Xcel and the National Groups "capacity block" option); or
    c. Adopt variable rate bill credits based upon amount of CSG capacity that the Commission determines is consistent with the public interest (OAG option);
    d. Solicit further Comments on an appropriate incentive design framework to be introduced at a later time; Or
    e. Take no Action

7. Bill Credit rates for co-located projects going forward

    a. Change the bill credit for new projects co-locating multiple one MW gardens to a VOS-based rate (Joint Commenters Option);
    b. allow Xcel to review co-locating multiple one MW gardens that are greater than 10 MW total through a competitive bid process similar to the competitive solicitation process used by Xcel for large utility-scale solar procurements and its Colorado Solar*Rewards Community program for larger CSGs (TruNorth Option); or
    c. Take no Action.

8. Other Incentive Designs

    a. Modify the CSG program to reward and incentivize projects that are located in highly desirable locations on Xcel's distribution grid or that provide additional public benefits, such as the revitalization of urban brownfield areas, through bill credit adders (the National Groups); or
    b. Solicit further Comments on an appropriate bill credit adder to incentivize projects that are located in highly desirable locations on Xcel's distribution grid to be introduced at a later time;

9. Require Xcel to make compliance filings and/or tariff proposals for any decision options adopted above within 30 days of the Commission's Order in this docket.

Staff Recommendation

Staff notes that a number of the recommendations made by commenters are conceptual in nature and would require follow up filings, either through additional comments, compliance filings, or tariff revisions before they could be implemented.

Section Three: Interconnection issues

Introduction

The CSG program rules require solar gardens to interconnect to Xcel's transmission system using the process outlined in the Company's tariffs governing the interconnection of distributed resources (Section 10). In its April 7 Order, the Commission found that Xcel's plan to use the Section 10 interconnection process for the CSG program met the statutory requirement to "establish uniform standards, fees, and processes for the interconnection of community solar garden facilities."[306] The Commission noted that Xcel's interconnection tariff sets forth a process and the estimated costs to interconnect solar gardens to the grid. Lastly, the Commission indicated it could revisit the use of the Section 10 interconnection tariffs if the parties' initial experience with the program demonstrated the need.

Ordering Paragraph 7 of the Commission's April 7 Order provided clear direction to Xcel that the Company is to meet all timelines set out in the Commission's 2004 interconnection Order:

> 7. Xcel shall complete engineering studies and interconnection cost estimates for prospective solar-garden operators within the timeframes set forth in the Commission's September 28, 2004 order in Docket No. E-999/CI-01-1023. Failure to meet these timeframes will extend the operator's deadline for achieving commercial operation on a day-for-day basis for the purpose of determining deposit refund.

After five months of experience with Xcel's interconnection process, parties are voicing concerns over the Section 9 and Section10 processes. They believe clarifications are necessary. These include: (1) clarifying overlap and addressing confusion between Section 9 and Section 10, (2) clarifying the timeline to complete engineering studies for 1 MW projects (even if these projects are part of a larger co-located project), (3) addressing delays for projects not first in the queue, (4) the need for more transparency in the queue process and possibly a pre-screen report, (5) more standardization of forms and requirements, (6) a minimum interconnection target goal to speed up the interconnection process, (7) requiring additional reporting on the status of interconnecting projects as a way to speed up the process, (8) setting up a process for those projects that could affect transmission, (9) whether site location changes should be permitted after projects are deemed complete, (8) how to provide more accurate cost estimates, (9) the need to adopt a cluster or group study process to allow developer/owners to share upgrade costs, and (10) when to begin the needed reform of Minnesota's existing interconnection process.

Parties believe that the success of the CSG program depends on the Commission's response to these interconnection problems. The SGC noted that "after the Commission spent considerable time setting clear timelines for the CSG program, including Section 9 of Xcel's tariff book, the

[306] Minn. Stat. § 216B.1641(e)(2).

fair, efficient and timely processing of applications continues to be the biggest concern facing developers."[307]

The DOC is concerned that many of the applicants, who submitted applications in December 2014, still have not had their applications deemed complete by Xcel. This is a significant delay. Given the slow pace of Xcel's interconnection process, developers are worried that there will be no gardens operating by the end of 2015 or 2016. Parties emphasized that the Commission should be careful not to introduce additional delays into the process.

Xcel has responded by indicating that delays in the interconnection process have been due mainly to incomplete applications as well as their large number; applicants have proposed interconnections to more than 65 separate distribution feeder lines; the Company believes that to date it has met all timelines set forth in Section 10. Xcel did note, however, that its distribution system was designed to serve load, not to interconnect generation, and that many projects are proposed for rural areas where load and capacity of distribution feeders are relatively small and the projects are large. Each distribution feeder line is unique, and the electrical capabilities of the feeder will depend both on the size and location of the proposed project on that feeder; therefore, there is no standardized approach to interconnection.

Preliminary review: Section 9 completeness and Step 2 of Section 10

MnSEIA commented that many of its members are experiencing difficulty getting their applications "deemed complete" under Section 9 so that they can move onto the interconnection process under Section 10.[308] Specifically, there has been difficulty getting initial engineering diagrams to conform to Xcel's internal and purportedly unpublished standards. Both the DOC and SGC commented on this issue, noting that it is unclear why diagrams that are part of completeness and not engineering review would receive such scrutiny.[309] These parties and others also questioned why Xcel, on day 30, would notify the applicant of a flaw and restart the 30-day clock, a sequence repeated many times for the same applicant. MnSEIA stated that this type of behavior on the Company's part contributes to the sense that the process is opaque and results in unnecessary delays at the front end. To facilitate a more rapid review in Step 2 (Section 10), MnSEIA proposed that Xcel be required to publish and provide more precise engineering requirements, reducing clerical work for Xcel's distribution engineers and making the process more transparent.

Regarding Steps 1 and 2 of the CSG application process, the DOC specifically noted the following concerns and sources of delay:

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[307] SGC, April 30, 2015, p. 2.

[308] Completeness is determined under the Section 9 tariff and projects then move on to the interconnection process in Section 10, which also has a completeness step for non-CSG applications.

[309] SGC, April 30, 2015, pp. 6-7. DOC, May 1, 2015, pp. 5-7. On pages 8-10 of its May 1 comments, the DOC provides a concise summary of the first four steps in Section 10.

- Is Xcel requiring additional information not listed in Step 1 of the tariff?
- Is Xcel restarting the 15-day clock when it requests additional information not listed in Step 1 of the tariff?
- Is Xcel waiting longer than 10 business days to notify applicants that the Step 1 information is not complete?
- Is Xcel waiting the full 15 days before informing the developer that additional or different information is needed?

In response, Xcel commented that its technical interconnection requirements are posted on the Company's website, including: sample one-line diagrams, requirements for engineering documents, and related information.[310] The Company believes it has been working diligently with developers to make sure engineering requirements are known, including spending a considerable amount of time with the implementation workgroup.

Xcel explained that the purpose of the Section 9 completeness review is to implement the first-ready first-served process, which ensures that applications will move smoothly through the interconnection process. Xcel argued that it is in the best interest of all applicants to allow only well-prepared projects to move forward so that the queue is not congested for longer than necessary. Also, an applicant's queue position is determined by the date the Company deems an application complete and queue position can be critical to an applicant. For this reason, Xcel argued that a rigorous review of the contents of one-line diagrams and site plans is appropriate and consistent with the policy goals stated in the CSG program by regulators.

Xcel went on to explain that application deficiencies at the initial completeness review step that result in a finding of incompleteness are non-trivial and could risk Company safety and reliability standards. Part of the Company's focus in the interconnection review process is to ensure that a proposed interconnection does not negatively affect service to the retail customers interconnected to the specific distribution feeder and protects the safety of field crews and the public. In many cases, the application's material deficiencies are the result of the applicant not using published standards or a decision not to hire qualified engineering personnel to design the technical portions of the project.[311]

Engineering study completion under Section 10, Step 4

MnSEIA noted the Commission's April 7 Order makes clear that Xcel is expected to complete its interconnection engineering studies within the timeframes set forth in the Commission's 2004 interconnection Order. The timeframe in that Order allows Xcel 40 working days to complete engineering studies for projects between 250 kW to 1 MW. Because CSG garden size is limited

[310] In addition, for all applicants, the Company includes a Section 10 cover letter that outlines the requirements for a complete one-line and site diagram.

[311] Xcel noted that many applicants have requested guidance from Company engineers to design interconnection facilities, since the applicants have not hired their own engineers. This places a burden on Company engineers and puts them at risk for potential personal liability under their professional engineering licenses.

to 1 MW, Xcel is expected to complete the engineering study for CSG interconnection applications within 40 working days. The Order also states Xcel shall "make all reasonable efforts to complete the Engineering Studies within the [allotted] timeframe.... If additional time is required to complete the engineering studies, [Xcel] shall notify the Applicant and provide the reasons for the extension."[312]

MnSEIA commented that this results in Xcel quoting a 90-working-day period for most 1 MW applications. Although co-located gardens may increase the complexity of Xcel's engineering studies, that does not obviate the requirement that Xcel "make all reasonable efforts" to complete studies for each individual 1 MW application in the 40-day timeframe. According to MnSEIA, Xcel should be able to analyze the distribution impact of a second, third etc. co-located 1-MW CSG project fairly quickly since at that point Xcel will already have the relevant system model for use. Xcel must notify the applicant if the Company needs more time, along with the estimated length of time and reasonable explanation for the delay. However, MnSEIA noted delays should be the exception, not the rule. It suggested that if Xcel is not able to meet these timelines, it should mobilize additional resources quickly. Fresh Energy, ELPC and ILSR also argued that Xcel must dedicate sufficient resources and make all reasonable efforts to meet interconnection timelines. They suggested that the Commission require Xcel to report on its progress in meeting required timelines and how projects are progressing through each step in the interconnection process.[313]

SGC is also concerned that Xcel has not followed timelines and process set forth in Section 10. SGC acknowledged the process has been confused by the involvement of two distinct tariffs with timelines whose coordination is unclear and may be independent of each other (i.e. Sections 9 and 10). SCG argued that delays have been related to unclear expectations about what is to be included in one-line diagrams, little direction from Xcel on how to correct alleged inadequacies, and the absence of utility personnel equipped to answer developers' questions. SGC emphasized the need for improved standardization, transparency and clearer channels of communication.[314]

In response, Xcel noted that meeting timelines is dependent on the quality of the application and the timely actions of developers. Often progress halts during the Section 9 completeness review or the Section 10 process as Xcel waits for applicants to fulfill responsibilities, by providing complete and/or correct information or making a go, no-go decision.

Xcel explained that to the extent the total project exceeds 1 MW, the Company's interconnection tariffs provide 90 working days to complete the engineering review.[315] Xcel explained that the majority of applicants have specifically requested that the Company study multiple 1 MW garden projects together, thereby agreeing to the 90-day study timeline, as well as an extension of the Section 9 sixty-day timeline. Xcel argued that because the engineering study is an

[312] Order, issued September 28, 2004, in 01-1023, Attachment 1 to the Order, p. 11.

[313] Fresh Energy, ELPC, ILSR, April 30, 2015, p. 4.

[314] SCG, April 30, 2015, pp. 2-3.

[315] Tariff Sheet Section 10, Sheet 95.

iterative process that must consider the complete proposed capacity to be added at a specific point on the distribution system, it is unworkable to divide each multi-megawatt project into 1 MW parcels for the purposes of determining the timeline study completions.

Optional parallel study process; addressing delays for CSG project applications that are not first in a given substation queue

MnSEIA indicated that currently multiple projects are behind other projects in a given substation queue, putting them in what might be considered project limbo. So far, Xcel has been unable to articulate a timeline for performing Section 10, Step 4, engineering studies for projects in this untenable situation, i.e. those projects behind others. Predicting when Xcel will complete engineering studies for the projects ahead in the queue is difficult. This places second in the queue projects in an untenable position and at risk of being delayed into late 2016 or beyond due to what MnSEIA sees as inadequate Company procedures. For these projects, MnSEIA proposed that the Commission direct Xcel to:

- provide more timeline transparency, including the anticipated date by which Xcel will complete its basic Step 4 engineering analysis for the projects ahead in the queue

- offer to proceed with the necessary Step 4 engineering studies for the less advanced project in "parallel" with the projects ahead in the queue. If the less advanced applicant in the queue agrees (or had already requested parallel study), Xcel would have 40 working days to complete the necessary Step 4 analysis

Xcel opposed MnSEIA's proposal for a parallel study option, arguing that parallel studies are not feasible. It explained that the grid is an inherently dynamic system and that the future condition of the grid cannot be surmised in order to perform a study for the second applicant in the queue. Xcel proposed that parties allow the public queue information agreement (discussed below) to be put into practice prior to implementing other measures such as parallel studies.

Optional cluster or group study process

SCG noted that nothing in Section 10 describes the process when one applicant's progress is dependent on another's. For example, under Section 10, applicants are provided with a statement of work (SOW) in order to begin engineering review, and once the studies are complete, they receive another SOW in order to commence construction of the interconnection upgrades required. For purposes of the CSG applications, Xcel plans to deliver a first SOW for a lower queued applicant *only after* the higher queued applicant has moved forward on its second SOW.

SGC understands why Xcel may feel compelled to process applications in this manner. However, it seems to go against the first-ready, first-to-proceed approach the utility adopted for this program. The Company now has more information about the projects in the queue. Thus, SGC argued that the application process could be more efficient if instead of processing

applications serially, a group study process was adopted. SGC believes the use of group studies and the potential for shared upgrade costs among CSG owners is possible and that such an approach would be more equitable reduce the impact of having lower queue priority and lead to valuable upgrades.[316] To this end, SGC requested that the Commission direct Xcel to begin developing a transparent cluster or group study process and method for distribution upgrade cost sharing immediately to allow for design and build-out by fall 2016.

Xcel did not respond formally to the proposal for a cluster or group study process (i.e. applicant cost sharing of distribution upgrade costs). Workgroup meeting minutes starting with March 4, 2015 indicate discussion of this issue that is ongoing. Therefore, staff believes the stakeholder workgroup may be the proper venue for this issue since any solution would require an agreement on project upgrade cost sharing among owner/developers.

Standardization of requirements and forms

SGC commented that setting clear expectations through standardized requirements or forms required under the various steps included in the Section 9 and 10 tariffs is important. Of concern is the fact that Xcel is requiring more information for one-line diagrams than it has in the past. SGC argued that the success of the CSG program will depend on model one-line diagrams being made available to applicants; SGC suggested Xcel could also include the information required for these diagrams in tariff language. Site plans are another area where Xcel's requirements are not set forth clearly. Section 10 simply requires a "site plan of the proposed installation" as part of Step 1. SGC commented that if there are particular requirements Xcel would like to see included in a site plan, it would be helpful for the utility to create a standardized model or itemize the information needed to complete these site plans and make it available to applicants. For both one-line diagrams and site plans, SGC included a list of what it believes are additional requirements that have not been expressly identified by Xcel.[317]

As noted above, MnSEIA asked that Xcel be required to publish and provide precise engineering requirements to reduce delays for applicants and to allow Xcel to process applications more efficiently.

In response, the Company indicated that it has worked with developers to try to ensure all engineering requirements are known and that all necessary information has been provided to developers. It will continue to do so both through its website and the stakeholder implementation workgroup. Moreover, the Company indicated its technical interconnection requirements are posted on its website, including sample one-line diagrams, requirements for engineering documents and related information.[318] However, the Company maintained that it's

[316] IREC also addressed this issue in February 24, 2015 comments, pp. 5-6.

[317] SGC, April 30, 2015, pp. 3-4.

[318] https://www.xcelenergy.com/staticfiles/xe-responsive/Admin/Managed%20Documents%20&%20PDFs/MN-SRC-Typical-1-line-Layout-1.pdf

https://www.xcelenergy.com/staticfiles/xe/Marketing/Files/MN-SRC-Requirements-for-Engineering-Documents.pdf

the rigorous nature of Xcel's review of the one-line diagrams and site plans is consistent with the Section 10 tariff.

How the Section 10 six-month application validity clock will affect CSG projects

SunShare argued that there is a lack of clarity regarding how the 6-month "validity" clock in Section 10 will impact CSG interconnection requests.[319] While this 6-month clock would appear to apply to all Section 10 interconnection requests (covering CSG developers and other distributed generators), SunShare believes the tariff language itself is vague and unclear. If applied to CSG projects, the rule could potentially prevent current project applications from being constructed after mid-2016 (i.e. more than six months after 2015 interconnection approval). Therefore, SunShare asked the Commission to require Xcel to clarify for CSG projects:

- when the Section 10 six-month validity clock starts and stops, precisely
- what the practical impact is (e.g. on application queuing) of Xcel deeming an approved Section 10 application to be no longer "valid" as the term is used in Section 10
- to which categories of Section 10 interconnection applications the 6-month clock applies

Queue transparency; public reporting on the CSG queue

Issues surrounding the publication of a transparent distribution interconnection queue have received attention in the stakeholder group and in written comments in this docket. MnSEIA, SunShare, SGC and most other parties argued in support of queue transparency.[320] These parties argued that a more public queue process will allow developers to determine whether a substation can handle a proposed garden project, avoiding filing of an application at a location where no substation capacity is available. MnSEIA explained that when faced with uncertainty about substation capacity limits, developers tend to overestimate project size, because they would rather withdraw an application than risk losing a project to another developer lower in the queue order.

SunShare noted that: "As shown in other states, increased interconnection transparency and cost-predictability will lead to better site planning and lower development and interconnection costs – benefiting Xcel, CSG developers, and their subscribers."[321] SGC asked for immediate action by Xcel to create "greater transparency and functionality in the queuing process through a pre-application request and the publication of a transparent queue."[322] It argued that queue

[319] Xcel Rate Book, Section 10, Sheet No. 94 ("An approved [interconnection] Application is valid for 6 months from the date of the approval.") See SunShare comments filed December 29, 2014, p. 5 and February 24, 2015, pp. 6-7.

[320] SCG, February 28, 2015, p. 8; MnSEIA, May 18, 2015, p. 2; SunShare, April 30, 2015, p. 3.

[321] SunShare, February 28, 2015, pp. 4-5.

[322] SGC, April 30, 2015, p. 1.

publication could keep developers anonymous through applicant identifiers, noting that the implementation group had made progress on this issue. The result will be to give all developers understanding of where they are in the queue so they can better evaluate how to proceed.

In response to developers' concerns for more queue transparency, Xcel agreed to disclose pending applications for CSG projects at specific locations, but it planned not to include other interconnection requests outside the program. Xcel proposed, and the stakeholder group agreed, to post public queue information, including, the CSG application identification number, county, substation, size, and application deemed complete date. Xcel has done so and this information is currently available on the CSG website.[323]

Xcel also indicated that it would make the full interconnection queue public as soon as internal technology allowed for a simple solution. It agreed that the interconnection queue provides valuable information to applicants and allows for more efficient use of developers' and the Company's time. However, it does not support full distribution system transparency at this time due to security concerns.

Pre-screen, pre-application or "snapshot" report

Although Xcel has started to provide a public report showing the number of CSG applications in the queue for each substation, SunShare commented that this report would provide only a portion of the substation capacity information requested by many of the parties in the docket.[324] For example, the public queue information will show only one subset of Section 10 applications (CSG projects), providing only a partial picture of available substation capacity.

For this reason, SunShare and other parties[325] suggested the Commission direct Xcel to develop a process under which CSG developers could pay Xcel for a "snapshot" of the current available substation capacity, including the number of DG interconnection applications (and requested MW capacity) currently in line for a given substation and/or feeder, the status of these interconnection requests, and other relevant information (including transformer loading).[326] This report would be available to applicants before or at the time they file applications and will probably require a tariff change. Information such as feeder voltage, distance from substation, substation capacity and transformer loading would be provided upon request for about $300-$500; however, no price has been agreed on yet.[327]

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[323] http://www.xcelenergy.com/Energy_Solutions/Business_Solutions/Renewable_Solutions/SolarRewards_Community-MN

[324] MnSEIA, April 2, 2015, p. 4; MN Community Solar, April 2, 2015, p. 3; DOC, March 4, 2015, p. 1.

[325] SGC, April 30, 2015, p. 5; IREC, February 24, 2015; MN Community Solar, April 2, 2015, p. 3.

[326] SunShare, April 30, 2015, p.3; March 4, 2015, p. 2; February 24, 2015, pp. 1-2. See also FERC Order 792.

[327] In comments filed February 24, 2015, SunShare and IREC requested that the Commission direct Xcel to provide information regarding engineering and modelling parameters Xcel uses to establish the "transfer minimum daytime load" (TMDL) for CSG applications under Section 10. However, it appears

Xcel noted that the pre-screen option is an unresolved issue. However, it committed to developing and making such an option available to applicants and potential applicants so that they have more information earlier in the interconnection process. The Company noted that workgroup members expressed general support for the pre-screen option, despite the fact that the new public queue may minimize the need for a pre-screen option. In carrying out its commitment to offer the pre-screen option, the Company agreed to compare possible pre-screen models (including fee structure) to both the option available in its Colorado jurisdiction and a similar mechanism required by FERC and in use by transmission operators. The Company indicated that the implementation workgroup will continue to work on a pre-screen option.

Timely and accurate cost estimates for Steps 4 and 5 of the Section 10 interconnection process

In addition to Xcel providing timely interconnection cost estimates as a result of its engineering analysis in Step 4 (Section 10), MnSEIA argued that it is important for Xcel to provide accurate, "bankable" interconnection cost numbers during Step 5 of the interconnection process. These cost numbers are a key element in defining the project's financial *pro forma*, and thus the project's final feasibility. According to MnSEIA, capital providers are aware that interconnection costs can vary widely across solar projects and that the magnitude of these costs can make or break the profitability of a given project. For this reason, capital partners typically require firm interconnection cost estimates before they agree to help underwrite a project. Therefore, apart from timeliness, it is also important for CSG financing that Xcel provide accurate interconnection cost estimates.[328]

MnSEIA proposed that the Commission adopt a clear rule that would hold Xcel to its best interconnection cost estimate available at the end of Step 4, as necessary to reasonably allow for the creation and financing of CSGs in 2015 and beyond. MnSEIA argued that by helping to "establish uniform standards [and] fees" for the interconnection of CSGs, this rule would also encourage the Company to devote sufficient engineering resources to the project early enough to provide an accurate, reliable CSG interconnection cost estimates on or before the Step 4 deadline.[329]

In response, Xcel explained that the interconnection study process is separated into two phases: an initial scoping phase that provides unit costs of the interconnection, and a detailed design estimate phase. Providing these two phases allows a developer the opportunity to withdraw their application if the rough scoping estimate is outside the general costs included in their business plan. If the applicant chooses to proceed after these initial cost estimates, the Company undertakes a more detailed design. This second design phase produces interconnection cost estimates as accurately as possible.[330]

SunShare may have dropped its request for formal Commission action on this issue.

[328] MnSEIA, April 28, 2015, p. 6.

[329] Minn. Stat. 216B.1641 (e).

[330] See Tariffs, Section 10, Sheet 116: "The Interconnection Customer is responsible for the actual costs to interconnect the Generation System with Xcel Energy, including, but not limited to any Dedicated

Setting a minimum interconnection target goal

As part of its market based approach, the OAG proposed that the Commission set a minimum target amount of CSG capacity to be approved by Xcel (signed CSG contract and interconnection agreement) in each calendar year beginning in 2015 and going forward.[331] The goal of such a target, along with other OAG proposals, would be to help reduce uncertainty related to the demand for CSGs and help control the pacing of cost impacts to non-participants. It would also reduce Xcel's incentive to slow down the program's growth and increase its incentive to resolve interconnection disputes and provide timely information to developers. In addition, it would create incentives for Xcel to resolve co-location disputes and smooth the pace of the program's growth. [332] This would create a more orderly and certain path of program expansion and assist in how the program would be synchronized with Xcel's resource planning. SunShare was generally supportive of such an incentive and also raised the possibility of a structural incentive obligating Xcel to provide compensation to developers for revenue lost in the interconnection process due to avoidable utility-side delays.[333]

Reacting to the OAG's proposal, Fresh Energy, ELPC and ILSR expressed interest in an annual minimum target goal "as a tool to motivate Xcel to process S*RC interconnection applications."[334] Their comments recommended that the DOC "is in the best position to develop such a target goal" and that it is understood to be feasible by the June 25 Commission meeting.[335] In comments filed May 18, these parties stated "an interconnection target goal seems to be the most effective Commission action to address the growing concerns that--at the current interconnection pace--few community solar gardens if any will be operating by the end of 2015"[336] and concluded by making a recommendation that the Commission evaluate an interconnection target for Xcel to reach by December 31, 2015, based on DOC analysis. This analysis should take note of the current interconnection status of applications and how many

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Facilities attributable to the addition of the Generation System, Xcel Energy labor for installation coordination, installation testing and engineering review of the Generation System and interconnection design. Estimates of these costs are outlined in Exhibit B. While estimates, for budgeting purposes, have been provided in Exhibit B, the actual costs are still the responsibility of the Interconnection Customer, even if they exceed the estimated amount(s). All costs, for which the Interconnection Customer is responsible for, must be reasonable under the circumstances of the design and construction."

[331] OAG, April 30, 2015, pp. 23-24. The minimum target goal was part of a larger set of proposals involving variable rates and a maximum CSG enrollment each year to guard against excessive rate impacts to non-participants. The minimum MW target in place in California was set for purposes of a competitive RFP.

[332] OAG described other benefits of setting a minimum requirement. See OAG comments, April 30, 2015, p. 23-24.

[333] SunShare, April 30, 2015, p. 2.

[334] Fresh Energy, ELPC, ILSR, May 18, 2015, p. 4.

[335] Fresh Energy, ELPC, ILSR, May 18, 2015, p. 5.

[336] Fresh Energy, ELPC, ILSR, May 18, 2015, p. 5.

could reasonably complete Step 10 of the Section 10 tariff process for interconnection in that year.[337]

Staff notes that the level of the target goal to be set with DOC guidance is both a technical and a policy question, complicated by the fact that Xcel must rely on the developers to comply with the steps in the Section 10 interconnection process; the completion of many of these steps is out of Xcel's control. For example, applicants could drop out of the process once they receive estimates of a required study or system upgrade cost. In setting a target goal, the OAG pointed to the fact that the Company's 2016 IRP supplement included 43 MW of "small solar" for 2015.[338] The OAG reasoned that given the majority of this "small solar" is likely related to the CSG program, 43 MW may be a reasonable starting point for establishing a minimum 2015 capacity requirement.

Assuming a target goal can be arrived at that is technically feasible, there must be some leeway to allow for the fact that insufficient CSG applications are forthcoming (unlikely in the present circumstances) or there are unforeseen problems with a particular applicant's progress toward completion. The Commission must allow for contingencies that affect Xcel's compliance with a minimum target not fully under its control. At the same time, the Commission might also consider financial penalties for failure to meet the annual goal and/or rewards for achieving it. Both the DOC and Fresh Energy proposed monthly reporting as a way to monitor Xcel's timely completion of steps in the interconnection process.[339] This monthly oversight may be another form of incentive to Xcel.

MISO process for reviewing transmission impacts

Another implementation issue addressed by the workgroup was the appropriate process for Xcel to follow when a project has an effect on the transmission system. This includes the process for Xcel to follow in contacting its own transmission engineers and working with MISO.[340] Developers are concerned that transmission review and contact/work with MISO may create additional delays in the process, some of which are necessary but which should not be allowed to continue indefinitely.[341] On February 24, 2015, IREC provided a full discussion of concerns regarding CSG projects and transmission system impacts.[342]

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[337] Fresh Energy etc, May 18, 2015, p. 8.

[338] OAG, April 30, 2015, p. 23, Footnote 56. In setting a specific MW target, the Commission should clarify if the target level MW are "nameplate."

[339] Fresh Energy, ELPC, ILSR, May 18, 2015, p. 8. They stated "require more frequent and thorough interconnection reporting to enable the Commission and stakeholders to track Xcel's progress meeting Section 10 timing requirements…".

[340] Transmission affects (backflow or back feed) are a function of both project size and existing distribution system capacity at that specific location. Projects 1 MW or smaller can affect the transmission system.

[341] SGC, April 30, 2015, p. 7.

[342] IREC, February 24, 2015, pp. 4-10.

On March 4, 2015, Xcel responded by indicating that it had studied this issue and agreed with IREC and other parties that CSG projects would remain in the Section 10 interconnection review process, even where an interconnection application might require additional review for transmission system impacts by MISO. Xcel noted that it had contacted MISO regarding their procedures and requirements for interconnection in order to fully understand their jurisdiction and applicable policies in addressing situations where an interconnection may cause backflow onto the transmission system. Based on that conversation, Xcel agreed with the comments submitted by other parties that projects will remain in the Xcel Section 10 interconnection process, even if potential backflow concerns need to be addressed through MISO.

The Company indicated that in accordance with MISO's policies regarding distribution-level interconnections, it would coordinate with MISO to conduct necessary review of transmission-level impacts that arise. It suggested transmission impact issues could be addressed on an application-by-application basis and indicated that it would continue to work with the implementation workgroup to address broader concerns or questions raised by developers regarding the interconnection process.[343]

As part of several meetings, the workgroup discussed the process Xcel should follow once a transmission impact is identified. However, given the technical nature of the issue, it was referred to a subgroup, which continues to work on the issue. The resolution of this issue and adoption of a process that works for CSG developers, Xcel and MISO is expected soon.[344]

Until this issue is resolved, Xcel is following a set of steps explained to the implementation workgroup and noted below. The current steps are explained on the Company's S*RC website, under "Engineering FAQs," (Question #12):

> 12. What if my project impacts the transmission system?
>
> Xcel Energy will refer your project to MISO for further review under the following circumstances:
>
> - If the interconnection affects the transmission system, which is currently defined by tariff as power being exported onto the bulk system. Xcel Energy transmission engineers will review the proposal and contact MISO and the applicant of the potential transmission impact.
> - MISO will assess whether more detailed study is required and, whether any upgrades are needed to accommodate the additional distributed generation.
> - If MISO determines that upgrades are needed, the applicant will be given the option of paying for these upgrades or reducing the size of their project to avoid the need for the upgrades.

[343] Xcel, March 4, 2015, p. 13.

[344] SunShare, April 30, 2015, p. 3.

Clarify that CSG developers may change the site associated with a given CSG project application

SunShare believes that developers should have the flexibility to change project site location at least once (for legitimate reasons) without having to submit a new CSG application.[345] This issue is closely related to the lack of transparency in the interconnection process and other interconnection issues discussed by parties.

For example, a CSG developer may need to change a site location if Xcel's engineering studies reveal that interconnection of an initial CSG project location is cost-prohibitive. In that scenario, the developer would still have the full 24 months (under Section 9) to achieve CSG commissioning, but would need to submit a new Section 10 interconnection application for the new site location. Xcel explained (at the implementation workgroup) that under its business rules, any change to a CSG application's site location would cause Xcel to deem the application "incomplete," even after the same application has already been "deemed complete" by Xcel. Under these business rules, SunShare explained that it is costly and difficult for developers to change site locations for a given application.

SunShare asked the Commission to clarify that once an CSG project application has been deemed initially "complete," Xcel cannot later revoke that finding of completeness (apart from situations where Xcel initially overlooked, but then later identified, a legitimate clerical defect with a CSG application filing).[346] Alternatively, SunShare proposed that the Commission could direct Xcel MN to adopt its Colorado business rule, which allows CSG developers to change the site of an S*RC application once before requiring the developer to submit a new S*RC application (and pay a second application fee).[347]

MnSEIA noted there are a number of legitimate reasons why a CSG project may have to change locations after its CSG application has been "deemed complete." Therefore, MnSEIA supported a one-time site location change that would not force a "complete" application to be retroactively deemed incomplete. Allowing an application to retain its "deemed complete" status creates greater certainty for developers and helps to lock in a rate.[348]

Xcel opposed the proposal to allow developers the flexibility to change locations after applications have been deemed complete. It noted that the location of a garden may be changed prior to the beginning of the completeness review but that completeness determines

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[345] SunShare, December29, 2015, p. 5; February 24, 2015, p. 5-6; March 4, 2015, p. 2; April 2, 2015, p. 2; April 30, 2015, pp.

[346] The DOC agreed with the SunShare recommendation. See DOC, March 4, 2015, p. 1.

[347] See Xcel Solar*Rewards Community - Policy for Site Relocation, available at

https://www.xcelenergy.com/staticfiles/xe/Marketing/Files/CO-SRC-Guidelines-For-Site-Relocation.pdf

("One site relocation is allowed without penalty as long as the original completion date is met.")

[348] MnSEIA, May 18, 2015, p. 4.

interconnection queue position. Changing a garden location requires a new completeness review; therefore a new application is required.[349]

Once an application is deemed complete and enters the interconnection queue, the developer cannot change the location of the garden site without abandoning their place in the queue. Xcel argued that the proposal that CSG developers should be allowed to change the site associated with a pending application due to interconnection issues is contrary to the concept of a "first-ready, first-served" application process, which encourages well-thought-out proposals. Solar-garden projects enter the interconnection queue once the Company determines an application is complete. Allowing developers to change the location of a proposed garden without having to proceed to the end of the queue would undermine the entire purpose of the queue and establishing a first-ready, first-served process.

Xcel went on to note that developers lock in the REC value in effect at the time an application is "deemed complete." Requiring a new application for a changed location prevents developers from creating "placeholder" applications in order to lock in a more favorable REC rate rather than accepting a new REC rate.

Reforming the Minnesota interconnection process

Even if the CSG program were not facing co-location issues related to Minnesota's interconnection process, IREC commented that there are systemic challenges to Minnesota's process.[350] However, IREC does not believe that the needed changes should slow or stall the CSG program, which can rely on existing procedures pending a more thorough-going reform.[351] However, according to IREC, the Commission could take some preliminary steps towards reform now, including:

- reporting information on CSG projects more frequently
- developing an electronic, web-based platform for interconnection application processing and data processing
- directing solar development (including but not limited to CSG) to optimal locations

IREC, as in the past, encouraged the Commission to use both the Small Generator Interconnection Procedure (SGIP) and its own *Model Interconnection Procedures* as a basis for reform.[352] IREC advocated strongly for the establishment of a pre-application report.[353] In

[349] Xcel, May 18, 2015, p. 25.

[350] IREC, February 24, 2015, p. 3, pp. 14-15.

[351] See comments of the National Group, December 1, 2014, and Joint Commenters, March 2, 2015. IREC and other parties proposed a dedicated docket or collaborative working group to perform a comprehensive evaluation of Minnesota's interconnection procedures. This stakeholder group should look at policy innovations in other states, such as: (1) issues of cost allocation, (2) identification and encouragement for optimal grid location, and (3) integration of distributed generation and other distributed energy resources into distribution planning.

[352] IREC, February 24, 2015, p. 2.

making reforms, IREC suggested looking at other states' reforms: California, Massachusetts, and Ohio best practices as well as FERC best practices; for example, IREC noted that California "Fast Track" procedures raised interconnections by 44%.

ELPC, IREC and Vote Solar collectively "The National Group" made many of these same points in comments filed December 1, 2014. One of the systemic recommendations of the National Group was for the Commission to order Xcel to develop further on-line grid mapping and other tools such as those used by Commonwealth Edison in Illinois to keep track of projects' status and milestones.[354] Both the National Group and Joint Commenters supported rewards/incentives for projects located in highly desirable locations on Xcel's distribution grid or that provide additional public benefits.[355]

MnSEIA provided a timeline for 2015 that is a template for the more systemic Section 10 issues related to Xcel's interconnection process: the sequential requirements for engineering, financing, and equipment purchase and construction.[356]

Engineering communications expectations for applicants

In the context of workgroup meetings, MnSEIA raised the issue of the difficulty of small developers in working with Xcel engineers; communication is poor and engineers are non-responsive. As a result, MnSEIA set up a subgroup, which met with Xcel staff and engineers to address the issue. The meeting was useful and hopefully will result in a "best practices" document that will: (1) set expectations for applicants new to the Section 10 interconnection process of what to expect in working through the process with Xcel engineers, and (2) hold Xcel accountable for specific turnaround times for communicating inadequacies and needed changes back to applicants.

Commission Decision Options – Interconnection Issues

1. Require Xcel to develop a pre-application report and process, by a specified date, under which CSG applicants have the option to pay Xcel for a snapshot (or pre-screen/pre-application report) similar to that described in FERC Order 792, of the current available substation capacity, the number of DG interconnection applications (and requested MW capacity) currently in line for a given substation and/or feeder, the status of these interconnection requests, and other relevant information, including transformer loading. (*SunShare, SGC and other developers)*

   [**Note**: The implementation workgroup is currently working on a pre-application option so the Commission may wish to receive input from the workgroup and Xcel on the

[353] IREC, May 18, 2015, p. 3.

[354] The National Group, December 1, 2014, p. 10.

[355] National Group, December 1, 2014; Joint Commenters, March 2, 2015.

[356] MnSEIA, April 28, 2015, p. 3 (Exhibit A).

specific wording of this decision option, including the timing for offering the option and the specific information to be included.]

2. Require Xcel to complete engineering studies and interconnection cost estimates for program applicants within the timeframes set forth in the Commission's September 28, 2004 Order in Docket No. E-999/CI-01-1023. Require Xcel to clarify the process set out in Sections 9 and 10 of its tariffs by:

   a. reconciling overlaps and confusion between Section 9 and Section 10 that have led to ambiguity in timelines and schedules (as described by the parties)
   b. providing more precise engineering requirements, including more precise requirements for Section 10, Step 2 of the interconnection process
   c. setting out clearer expectations of the documents applicants are requested to submit at each step in the CSG application completeness process and in the interconnection process by providing standardized requirements or forms for each step, including providing a model one-line diagram to all CSG applicants and a clear list of all information required for both a one-line diagram and a site plan.
   d. providing more timeline transparency, including the anticipated date by which the Company will complete the Step 4 engineering analysis for projects ahead of other projects in the queue.
   e. providing the most accurate interconnection cost estimates available at the end of Section 10, Step 4 of the interconnection process.

   (*MnSEIA, SGC, DOC, Fresh Energy, ELPC, ILSR, and other parties*)

3. Require Xcel to show cause as to why it is not in violation of the Commission's April 7, 2014 Order requiring Xcel to "complete engineering studies and interconnection cost estimates for solar garden applicants" within 40 working days. (*MnSEIA*)

4. Require Xcel to offer to proceed with the necessary Step 4 engineering studies for the less advanced applicant projects in the queue in parallel with studies for the more advanced applicant projects in the queue. If the less advanced applicant in the queue agrees (or had already requested parallel study), clarify that Xcel will have 40 working days to complete the necessary Step 4 engineering study analysis. (*MnSEIA*)

5. Require Xcel to work with the implementation stakeholder group to begin to develop a cluster or group study process and method for distribution upgrade cost sharing among applicants. The development timeline for the study should allow for project completion by fall 2016. (*Staff's interpretation of SGC recommendation)*

   [**Note**: It is not clear if a group study process would be part of Xcel's tariffs or if it would require formal Commission approval, since it may be driven by applicants with the assistance of Xcel.]

6. Require Xcel to make changes to its interconnection process as proposed by IREC and the National Group, including:

a. reporting required information sooner or at more frequent intervals for CSG projects
b. developing an electronic, web-based platform for interconnection application processing and data tracking
c. providing information necessary to direct solar development to optimal locations on the grid, potentially via electronic maps

[**Note**: If the Commission adopts any of the decision options above (6a, 6b or 6c), it should indicate the timeframe within which they are to be completed.]

7. Require Xcel to clarify precisely:

   a. when the Section 10 six-month validity clock starts and stops
   b. what the practical impact (e.g. on application queuing) is of Xcel deeming an approved Section 10 application to be no longer "valid" as the term is used in Section 10
   c. which categories of Section 10 interconnection applications the 6-month clock applies to

   (*SunShare*)

8. Require Xcel to allow CSG developers the flexibility to change a project site location, for legitimate reasons, without having to submit a new CSG application. Clarify that once a CSG project application has been deemed initially "Complete," Xcel cannot later revoke the finding of completeness. (*SunShare*)

9. Require Xcel to meet MW capacity targets for contracted capacity for CSGs in 2015 and in 2016. Set a MW target capacity level of 43 MW (AC, nameplate) that Xcel must meet by December 31, 2015 and 45 MW (AC, nameplate) by December 31, 2016.

   [**Note**: These MW targets come from Xcel's IRP supplement filed March 16, 2015, Table 2, p. 7, and were recommended by the OAG. Other parties, however, have not recommended specific target levels, although some have proposed that the DOC do the analysis and propose a target level.]

10. Appoint a neutral third party observer, agreeable to all parties, placed in-house at Xcel to monitor and report on Xcel's project interconnection progress. (*Fresh Energy, ELPC, ILSR*)

11. Require Xcel, as part of its monthly updates to the Commission in this docket, to:

    a. identify each instance in which an application was deemed incomplete or otherwise returned to the applicant for additional information, the additional information being sought from the applicant, and the amount of additional time taken for processing the application as part of the Company's monthly CSG updates to the Commission

b. identify each instance in which the Company has not met a Section 10 tariff interconnection process timeline, or otherwise restarted the timeline (i.e. if the process grants Xcel 15 days for preliminary engineering review, and the Company requests additional information from the applicant on day 14, the time permitted for review is reset for another 15 days at that point), and the reason for not meeting or restarting the timeline.

(*Department*)

12. Require Xcel to provide weekly progress reports to the Commission on its progress meeting required timelines and how projects are progressing through each step of the Section 10 interconnection process. (*Fresh Energy, ELPC, ILSR*)

13. Require any modifications or clarifications that require a tariff filing to be filed within 30 days of the written Order issued in this docket, unless otherwise specified.

Staff Recommendation

If the Commission selects Decision Options 1, 2, 4, 5, 6, 7 or 8, staff notes that some of these changes may need to be memorialized in a tariff filing and therefore also recommends the selection of decision option 13. However, staff also notes that some of the language in those decision options is conceptual and therefore the filing would be subject to comments and reply comments, and may need to return to the Commission for the ultimate determination on language. Depending on the decision options selected, the Commission may wish to ask the DOC and Xcel to indicate if a tariff change is necessary. If it is, the Commission should be sensitive to making the review and approval process as rapid as possible. The Commission may wish to avoid revisions to Section 10 (or Section 9) that could results in delays for the CSG applicants struggling to meet 2015 and 2016 construction schedules.

Decision Option 9 may require additional filings and potentially could overlap with the resource plan docket. The Commission would need to clarify how operationally the Department would set MW capacity targets.

Staff notes that Decision Option 10 does not state how the neutral observer will be funded nor provide other clarifications on who would set his or her exact role (including, but not limited to, who the observer would report to, how regularly, and other implementation details). However, given the difficulty of addressing the issues raised regarding interconnection (transparency, clarity and timing), staff has included the full range of proposals provided by the parties.

Minn. Stat. § 216B.1641 COMMUNITY SOLAR GARDEN

(a) The public utility subject to section 116C.779 shall file by September 30, 2013, a plan with the commission to operate a community solar garden program which shall begin operations within 90 days after commission approval of the plan. Other public utilities may file an application at their election. The community solar garden program must be designed to offset the energy use of not less than five subscribers in each community solar garden facility of which no single subscriber has more than a 40 percent interest. The owner of the community solar garden may be a public utility or any other entity or organization that contracts to sell the output from the community solar garden to the utility under section 216B.164. There shall be no limitation on the number or cumulative generating capacity of community solar garden facilities other than the limitations imposed under section 216B.164, subdivision 4c, or other limitations provided in law or regulations.

(b) A solar garden is a facility that generates electricity by means of a ground-mounted or roof-mounted solar photovoltaic device whereby subscribers receive a bill credit for the electricity generated in proportion to the size of their subscription. The solar garden must have a nameplate capacity of no more than one megawatt. Each subscription shall be sized to represent at least 200 watts of the community solar garden's generating capacity and to supply, when combined with other distributed generation resources serving the premises, no more than 120 percent of the average annual consumption of electricity by each subscriber at the premises to which the subscription is attributed.

(c) The solar generation facility must be located in the service territory of the public utility filing the plan. Subscribers must be retail customers of the public utility located in the same county or a county contiguous to where the facility is located.

(d) The public utility must purchase from the community solar garden all energy generated by the solar garden. The purchase shall be at the rate calculated under section 216B.164, subdivision 10, or, until that rate for the public utility has been approved by the commission, the applicable retail rate. A solar garden is eligible for any incentive programs offered under either section 116C.7792 or section 216C.415. A subscriber's portion of the purchase shall be provided by a credit on the subscriber's bill.

(e) The commission may approve, disapprove, or modify a community solar garden program. Any plan approved by the commission must:

(1) reasonably allow for the creation, financing, and accessibility of community solar gardens;

(2) establish uniform standards, fees, and processes for the interconnection of community solar garden facilities that allow the utility to recover reasonable interconnection costs for each community solar garden;

(3) not apply different requirements to utility and nonutility community solar garden facilities;

(4) be consistent with the public interest;

(5) identify the information that must be provided to potential subscribers to ensure fair disclosure of future costs and benefits of subscriptions;

(6) include a program implementation schedule;

(7) identify all proposed rules, fees, and charges; and

(8) identify the means by which the program will be promoted.

(f) Notwithstanding any other law, neither the manager of nor the subscribers to a community solar garden facility shall be considered a utility solely as a result of their participation in the community solar garden facility.

(g) Within 180 days of commission approval of a plan under this section, a utility shall begin crediting subscriber accounts for each community solar garden facility in its service territory, and shall file with the commissioner of commerce a description of its crediting system.

(h) For the purposes of this section, the following terms have the meanings given:

(1) "subscriber" means a retail customer of a utility who owns one or more subscriptions of a community solar garden facility interconnected with that utility; and

(2) "subscription" means a contract between a subscriber and the owner of a solar garden.

History: *2013 c 85 art 10 s 2*